National Surveillance System (NSS)
Transitional Islamic State of Afghanistan

Round One Surveillance Reports
Samangan Province
(data collection: Fall 2003)

prepared by

GOAL
Food Security and Nutritional Surveillance Team

in partnership with

Samangan Province Surveillance Unit
◆◆◆
Ministry of Rural Rehabilitation and Development,
Ministry of Agriculture and Animal Husbandry, and
Ministry of Health

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Samangan Province Reports

Samangan Surveillance Unit

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Ministry of Rural Rehabilitation & Development, Ministry of Agriculture & Animal Husbandry & Ministry of Health

Aybak District

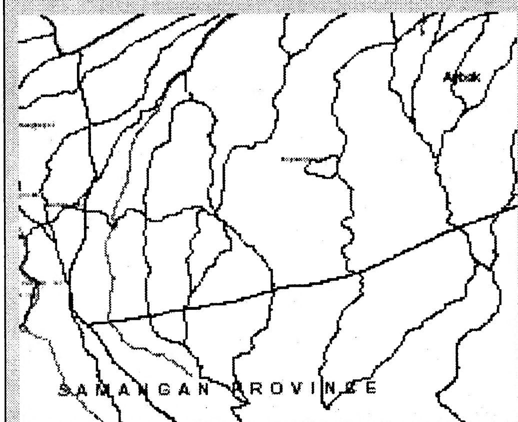
- Chochman Sentinel site

Fall 2003

SUMMARY FINDINGS FOR CHOCHMAN SENTINEL SITE IN EASTHERN HAZRAT SULTAN DISTRICT

(These findings are based on field survey of 20 households and Chochman village leaders interview. These findings should not be assumed to representative of other parts of Afghanistan)

Afghanistan
Samangan Province



Contents of Bulletin **Page**

NSS Methodology: After final sentinel site report The report is organized so that for each sentinel site in Kohistan, key indicators representing the main components of each of these three categories are presented and discussed in a narrative format.

Food Security

- None of the household considers the food situation worse than four months ago. 10% of households consider that food situation was worse than one year ago. However, 25% of households visited did not have enough to eat in the past four months. Though none of the families interviewed felt that the food situation would be worse in the next 4 months or worried where their food was coming from. Many did express the view that they did not know how to think about such a matter. However, Household enumerators thought that 45% of the households did not have enough food to last through the winter. Dietary Diversity is a concern of "poor" income households in the village. However, these concerns are based on the frequency of consumption reported by households.

Risk to Lives

The crude mortality rate is above both the emergency threshold rate (1.92 deaths/10000 people per day) and the normal developing country level (0.5 deaths /10000 people per day). Furthermore, for children under five years of age, the mortality rate (3.85 deaths/1000 people per day) does not compare favorably with the stable developing country rate (1.0 deaths/10000 people per day) and is higher than the emergency threshold rate (2 deaths/10000 people per day). Morbidity patterns of children under five years of age were high (ARI: 27%, watery diarrhoea 15% and bloody diarrhoea 3.8%)

Livelihood Security

- Half (50%) of all households reported stable income over recent months, while 35% of households reported an income increase and (15%) of houses experienced a drop in income). This contrasts with last year's trend where most households (80%) reported increased income compared to only 35% in the last four months. This instability in income rates suggests some livelihood insecurity.

What is the NSS?
The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs.

Methodology
The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households' overtime. Sites are selected so that they mirror the majority of the communities with respect to agro-ecological features, economic activities, available services and people in a given area (livelihood / agro-ecological zone). Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel may not be representative of every village in the zone. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same zone (See Annex I for detailed information on methodology).

OBJECTIVES OF REPORT

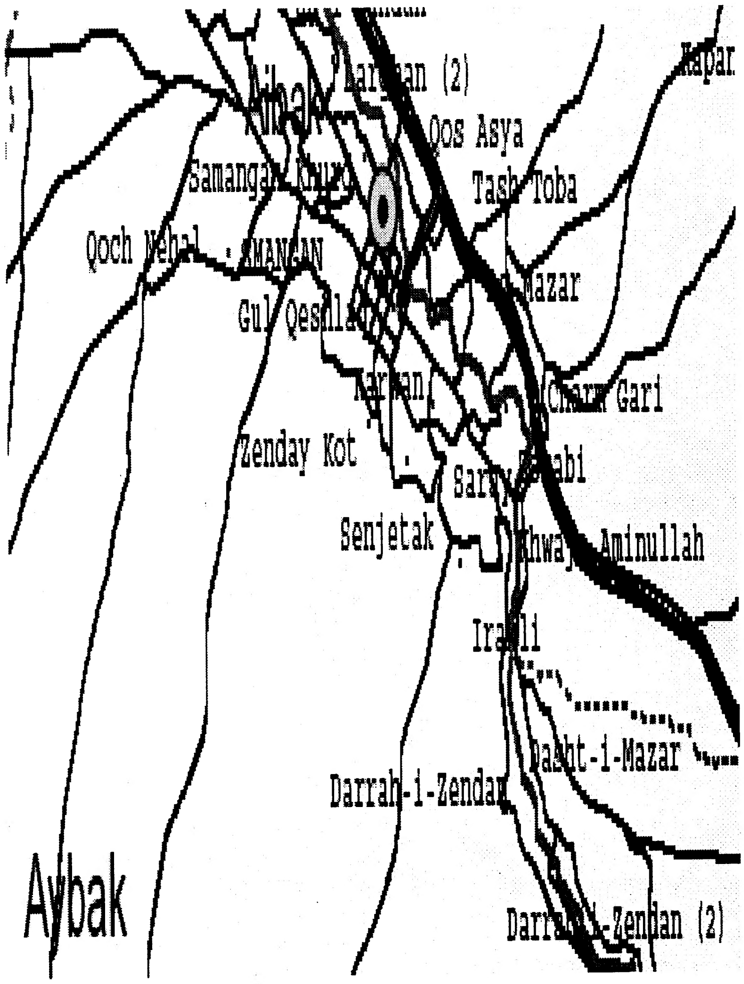
- Provide current information on household food security status in Hazrat Sultan District
- Provide information on risk to lives and nutritional risk of individuals in Hazrat Sultan District
- Provide information on the current household livelihood security situation in Hazrat Sultan District, specifically looking at current shocks to livelihoods and the ability of households to adapt to (cope with) these shocks
- Develop a better understanding of the vulnerability and risk of communities and households in Hazrat Sultan in relation to issues of food security, mortality, health and nutrition.

Additionally, this report provides baseline information on indicators that are unique to a local area and have not yet been explored in the depth needed for use in guiding programmes and policies. They are:

- Characteristics of household wealth in Hazrat Sultan District
- Livelihood Strategies employed in Hazrat Sultan District
- Presence of morbidity, mortality and malnutrition in rural communities in Hazrat Sultan District.

Finally, the report aims to provide information on how government and other agencies can use this increased understanding of livelihoods, vulnerability and risk in order to design and prioritise effective policies and programme interventions.

LIVELIHOOD ZONES FOR HAZRAT SULTAN DISTRICT



Livelihood zones in Hazrat Sultan District can be divided into three distinct agro-ecological areas. These distinctions impact household livelihood patterns, and one sentinel site was selected from each area. Most of the province consists of mountainous, rainfed farmland and irrigated valleys. However, this report will focus only two agro-ecological zones. This report includes information on each sentinel site.

Zone 1: Rainfed Land (39 villages): Chochman: This Zone covers South west of Hazrat Sultan. Livestock and rainfed wheat and barley are the main source of agriculture production. The surrounding villages share similar livelihoods.

Zone 2: Grazing Land, Irrigated and rainfed land (65 villages): Sarqia Afghania

Zone two covers the South of Hazrat Sultan. Sarqia Afghania and the surrounding communities share similar livelihoods and are located in river/canal-irrigated downstream valleys. The source of water is river that runs through Khuram Wa Sarbagh to Sarqia Afghania. The river water is used for both irrigation and household consumption. Livestock, wheat and barley crops are the main source of income for these villages, but they also have intensively irrigated small-scale horticulture production during the summer.

Zone 3: Mixed Mountainous and down stream valleys (16 villages): Nawabad Qaracha Bolaq: Zone three covers the South Eastern section of Hazrat Sultan. The area called Qoroq (fertile soil and high water table level). A large number of springs feed into irrigation systems, allowing for small plots of intensive agriculture. Beside, the wheat and barley crops the areas are a famous producing sweet melon, water melon and squash.

Samangan Province is in Northern Afghanistan. It shares a border with Kunduz to the North and is bordered by Baghlan to the East and Bamyan to the South and Balkh and Sari Pul Provinces to the West [*Appendix 1: Map showing rural poverty by province*]. Samangan consists of five districts: Aybak, Khuram Sarbagh, Roy-I-Duab, Dar-I-Suf and Hazrat-I-Sultan. Aybak city is located in Aybak District and is the provincial capital. It is on the Mazar-Kabul highway and is 120km SE of Mazar. It is situated in a wide valley between the mountains of Chagat to the North, Kohi Bas to the South and Dal Khaki to the West.

Demography
The population of Samangan is approximately 318,500 and is of mixed ethnicity. The Tajik and Uzbek population make up 60%, Pashtoon 20%, Hazara 15% and Turkmen 5%. The population of the main city of Aybak is 21,786, the Aybak district population is 87,670.

Socio-economic Information
The main source of income for the area is from agriculture, clerical work, teaching and retail. For women, income is gained through skilled work such as tailoring, embroidery or weaving, or through domestic activities such as washing clothes, cleaning and vegetable production. There is a high incidence of poverty and many families lack basic necessities such as adequate shelter, food and water.

Hazrat Sultan District
Located in Samangan province, Hazrat Sultan has irrigated land area of 7,553 hectors (ha) and 41,471 ha of rainfed land with population of 54,000. Specific vulnerabilities have evolved due to decades of conflict and political instability. Communities here are characterized by weakened or non-existent institutions, high susceptibility to violence, forced displacement of people, denial of basic human rights to some groups within the community and high livelihood vulnerability. Drought has compounded the challenges faced by communities and Hazrat Sultan residents have recently lost livelihood resources (stocks and assets) and basic livelihood strategies (agriculture, wage labour, trade and outcome living) have been drastically undermined. Food security remains uncertain in most rural communities, as does livelihood security and personal security of individuals. Study of these trends will allow insight into the natural resilience of community livelihoods.

Administrative System and Political Affiliations
The civil war in Afghanistan can be described as a complex political situation. The ethnic conflict is embedded in, and is characterized by loyalty to one particular ethnic group military leader and strong antipathy towards other ethnic group leaders. Administrative, political and military power holders often play a fundamental role in determining access to resources. The overriding issue of the conflict in Northern Afghanistan is the power struggle between Jamiaat military party and the Jumbesh military political group. After the fall of Taliban most of Samangan province has been loyal to Jumbesh military power and the Samangan governor who is Samangan Jumbesh party representative. However, there is a presence of Jamiaat military group control in some areas of the province. Sometimes, the areas are characterized by a high attention incidence of fighting, violence because of the presence of both armed forces.

GENERAL CHOCHMAN INFORMATION

Chochman is the village represent Livelihood Zone two in this report. It is the sentinel site chosen to represent the 39 villages of the South west of Hazrat e- Sultan and is located at an altitude of 1500 meters.

The majority of Chochman settlement identifies themselves as Uzbek and speak Uzbeki language. The village currently has 6 mosque and 400 households. Of these households 53% are male and 47% are female. Household size differ with wealth, "Wealthy" households tend to have more family members compared to "middle" and "poor" households. For most likely poor households tend to split into nuclear households when member of the households get married.

	Average Household Size
Wealth	**7.3**
Middle	**7.7**
Poor	**5.4**
All Households	**6.6**

The Qaruadar (village leader) Haji Mula Khan Shah has been chosen by the people of this village as a village leader. The leader of the village with the *shura* (village elders) group makes all the decisions and makes facilities for the community. Usually, all disputes within the village are settled by a group of village elders. They have administrative links to the Hazrat Sultan district, which is 2 hours away by donkey or foot. The district governor is responsible for his district to the provincial centre, at this point, Aybak. Farmers pay land taxi of 50 afs/ jerib of land to the district level.

The community categorized households into three different wealth groups, or socio-economic categories. The table below describes the type of features characterizing each wealth group and the percentage of households falling into each category.

These socio-economic groups will be used throughout the report to understand how food security, livelihood security and risk to lives may be different for households of different socio-economic status.

There is a large difference in the household size between the wealthy and the other two groups that the enumerators attribute to a few different reasons. It is seen that the rich men have more than one wife at a time and so bear children from both wives and that the sons of rich families do not separate from the family after marriage. In addition, members of poorer families may migrate to find work and so contribute to a smaller family.

In Chochman village has one primary school for boys and girls (1 to 6th grade) for the boys and the girls of the village that is relatively within a short distance and the student are able to walk. School has thee classes and each class has between 50 and 60 students both for girls' class and the boys' class.

Wealthy Households: 20 percent (Four households)

Households have more rainfed land, tractor, and more than 50 livestocks. Usually wealthy households have more than one donkey, camel that they will use for transportation.

--women--

These households have between 60 sheep, cows and more than on horse. These households also have rainfed land (100-300 jiribs) and Tractor.

--men--

Middle Households: 35 percent (Seven households)

These households normally have only one house. They have livestock, and few jiribs of land, donkey and a dog that they will use to help their livestock.k

--women--

These households have a house and limited number of livestock (15 - 25). Usually, middle income men have more than one donkey and home. Mostly household will have land or he will be sharecroppers.

--men--

Poor Households: 45 percent (Nine households)

Household with limited assets. Households who are casual labour and have no access to land. Spinning wool. These holds have only one house, donkey and mostly one or two cows

--women--

Households who have only home and no other assets. Households with no livestock and doing casual labour. . *These holds have only one house, donkey and mostly one or two cows*

--men--

After the fall of Talliban, the Chochman village has been loyal to the Jumbush party and the Hazrat Sultan governor who is both Hazrat Sultan Jumbush party representative and Afghanistan transitional government representative. Most households have a high number of dependants, particularly children and economically active unemployed immediate relatives. However, the average household size and dependency ratio is higher in Chochman than rest of the district Hazrat Sultan.

Further more, social networks are essential for livelihood strategies. Women play a major role in household's affairs. Children often help women with accomplishing some of their responsibilities. Men have more authority than women. Some men are engaged in wage employment. It is the men who have control over the large agricultural activities and who are involved in local community politics at ethnic or tribal authority level.

Gender was found to be critical in the household structure and processes that relate to rural livelihood security. The data shows unequal gender relations at household level. To a large extent, household headship determines the access of the household to assets and resources, division of labour, decision-making, power and livelihood strategies.

Female-headed households tend to diversify their activities to earn income in cash and in kind. Gender was identified as an important factor in using indigenous knowledge in enhancing livelihood security. Both men and women were found to possess indigenous knowledge. Women's indigenous knowledge is essential for ensuring household food security, maternal health and child care and income generation though weaving fiber clothes, production of carpets, and handicraft. Their knowledge is not limited in food production and post harvest processes.

However, men utilize their indigenous knowledge in agricultural production, carving and traditional medicines.

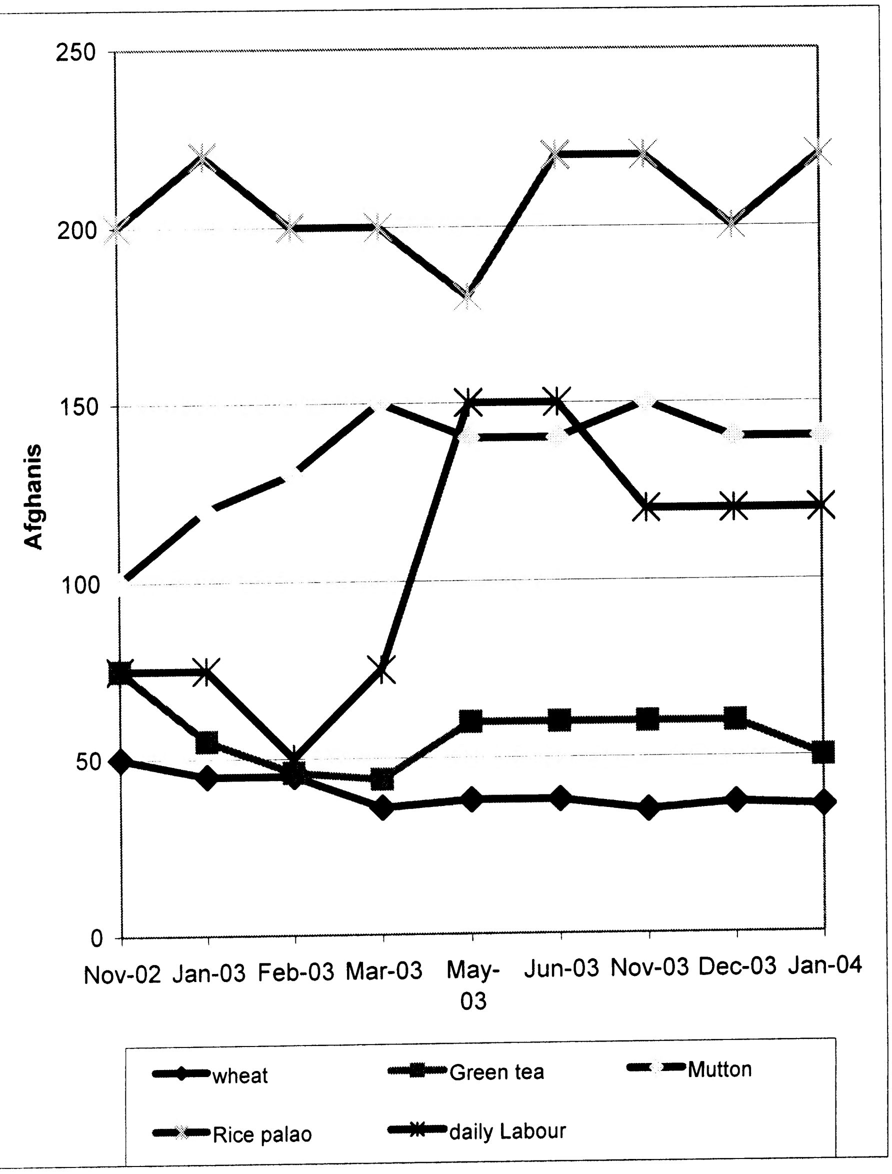
	Wealth Group		
Assets and Activities	**Wealthy (20%)**	**Middle (35%)**	**Poor (45%)**
Male Group perception			
Land	100- 300 Jeribs	10-15 Jeribs	0-5 Jeribs
Sheep/goats	50	15-25	None – 1
House	1-3 rooms	1 room	1 room
Donkey	1-2	1	0-1 (own or borrow)
Water	Collect with donkey	Collect with donkey	Collect with donkey
Carpet	1-3	1-2	0-1
Gillim	2	1	1-2
Travel	Mazar or Aybak Market	None	None
Employment	People work for them	Does own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to the poor households	None	Receives Zaqat
Female Group perception			
Land	100 Jeribs	20-50 Jeribs	0
Sheep/goats	50	15-25	None
House	3 rooms	1 room	1 room
Donkey	3	1	0
Carpet	4-5	1	0
Iranian carpet	1	0	0
Gilim	4-5	2	1
Travel	Aybak	None	None
Employment	People work for her	Does her own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to Mullah	None	Receives Zaqat
Clothes	Has several dresses	Has some dresses	Has less dress
Jewellery	Has many coins, a watch and bracelets	Has some coins (not silver)	Has none or two

Location of Market	Time taken to reach market		Cost of getting to market	Market Accessible in winter
	Vehicle	Foot		
Aybak	2 hours	Half day	140	Yes

MARKET ACCESS
Aybak bazaar market is the closest food market to Chochman village and the sorounding villages. Most of the Chochman households can not afford to travel to this market for their daily grocery. This is because of the distance to the market, people normally stay overnight in Aybak city and if they do not have a relative, which is the case most of time, there is accommodation charge on top of the 140 afs round trip travel cost by vehicle.

The roads are present and relatively good. The Chochman residence can not get all the basic food items from the Hazrat Sultan bazaar. Most of food and none food items and medicine drugs are always needed to travel to Aybak city bazaar. Most of Chochman households prefer to do their shopping in Aybak city, the believed reason being that food and none food items are cheaper in the big city market rather than the district bazaar. Most households send one household member to the market on a market day (Mondays and Thursdays, weekly) during, summer, spring and autumn. All the above two markets are accessible all season or year round.

The people in Chochman go to the Aybak market to trade wheat and livestock and to buy both food and non-food items. Transactions in the market take place using cash. However, both bazaars people can trade non cooked food items such as agriculture crops to other items that they want.



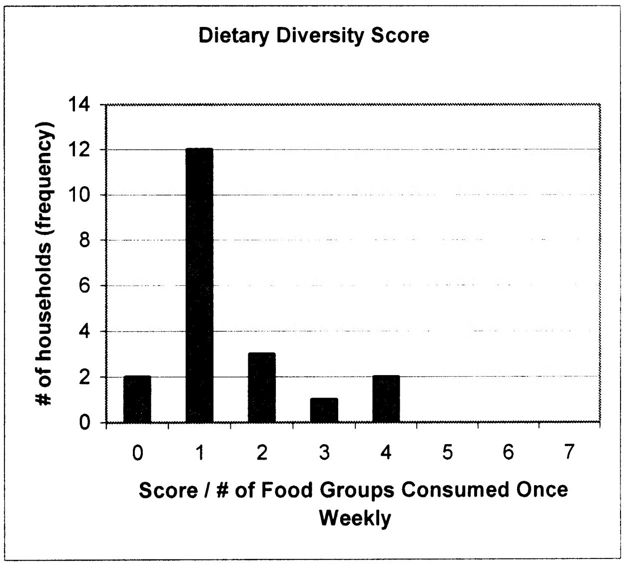
MARKET PRICES
Chochman households rely on Aybak market for food and non-food items, 30% of households purchase wheat. Wheat prices have been stable over the past year and impact daily labour rates since many workers are paid wheat for work. When prices decrease, whilst labour rates increase, it becomes more profitable to work for wheat compared to growing own crop.
As shown on the graph to the left, wheat and green tea prices have been stable this year. However, daily labour rates increased from March 2003 reaching a peak of 200 Af's per day in June. Rates then began decreasing on November. The same trends held for both rice and mutton. Rice reached a peak of 220 Af's per Kg from January, June and November 2003 and January 2004. Mutton prices reached a maximum price of 150 Af's in January, March and November 2003.

Mutton and rice increases directly impact village food security since these are staple food items. Households also purchase vegetable items (potatoes, spring onions, okra and carrots) from Aybak market: prices have remained steady. There are seasonal shortages of some vegetables, though this does not seem to impact vegetable prices nor

is demand increased during off-season. Households simply purchase what is available at that time in the market.

DIETARY DIVERSITY - DIET QUALITY

Dietary diversity is a primary component of food security. Previous studies have shown that dietary habits in Afghanistan are not very diverse and consequently people are at risk of micronutrient deficiency disorders and related diseases. It is not entirely clear how dietary preferences and types of food available interact to determine household dietary patterns. In order to better understand the quality of diets in the last four months, surveyors asked about the frequency of eating foods from different food groups.



These results were used to create a dietary diversity score in order to capture dietary quality and monitor quality overtime. A score was calculated for each household and the results graphed in the chart on the right. The diversity score is calculated by attributing **a score of "1" to each food group that was eaten at least once weekly** by the household. Thus, households with a higher diversity score have a more diverse diet. Repeated surveys throughout the country indicate that most households consume cereals or food staple on a daily basis and thus cereals were not included in the diet diversity score. On average all households combined in Chochman had a dietary diversity score of 1.5. The above histogram shows that two households scored "0", where 12 households scored "1" and 3 households scored "2". Furthermore, three households scored "4" and no one household scored "5", "6" and "7". Diversity scores are relatively or slightly different between Wealth groups. "Wealth" group score of 2.7 whereas "middle" score 1.8 and poor wealth group score 1.3. These results suggest that households either have no the means to buy more expensive foods or, do not acquired a preference for a more diverse diet. This could also mean that variety of food groups may not available from the nearest food market or produced locally.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households combined. The data shows that all households are eating protein rich foods (meat, milk) at least once month and (eggs and pulses) at least less than once a month to complement their cereals (wheat and barley). However this data does not reveal information on sufficiency of protein intake.

The choice of protein for households of this village does differ by wealth group. Wealthy households eat meat twice a week whereas "middle" eat meat two to three times a month and "poor" eat meat once a month. Wealth groups eat related milk products 2-3 times a month, whereas middle and poor households eat at least once a month or less. All Wealth groups did not eat pulses, eggs and green leaf vegetables for the last four months. However this data does not reveal information on sufficiency of protein intake.

In the last four months, all households seem to be eating vegetables of; carrots, onion, okra and potatoes for at least twice a week compare to fruits where "wealthy" eat fruits once a week, "middle" two to three times a month and the "poor" households seem to be eating once a month or less. In this village the result shows that wealthy households had better diversity diet compare to both "middle" and the "poor" groups.

As data was not collected on quantities or actual consumption, it is not possible to make statements regarding consumption of vitamins and minerals. Areas of potential concern would be: 1) sufficiency of consumption of vitamin A from animal sources and beta-carotene from plant sources, 2) sufficiency of calcium consumption from milk related products and water (much of the water in the area is hard) considering the frequency of consumption and the limited amount available in other food items consumed, 3) sufficiency of vitamin C from fresh plant sources.

Average Frequency of Food Group Consumption by Wealth Group

Wealth Group	Meat	Milk, Yogurt, Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other Vegetables	Fruits
Wealthy	5.0	3.8	1.3	1.0	1.0	5.3	3.5
Middle	2.6	1.7	1.3	1.3	1.0	5.6	2.9
Poor	1.8	1.2	1.2	1.4	1.0	4.9	2.0

1 = Never Eat
2 = Once a month or less
3 = 2 to 3 times a month
4 = Once Weekly
5 = Twice Weekly

All Households	2.7	1.9	1.3	1.3	1.0	5.2	2.4	**6 = 3 to 5 times Weekly** **7 = Always**

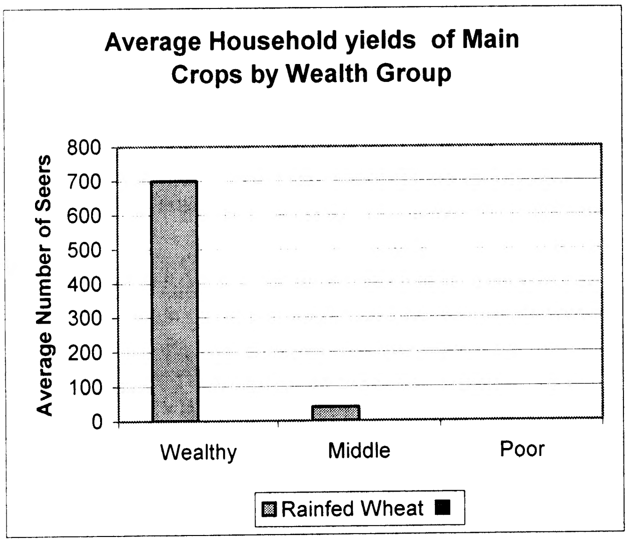
CROP PRODUCTION

Rural and semi-rural areas in Afghanistan are still highly dependent on subsistence agriculture for their own consumption, thus monitoring annual crop yields and amount planted can help predict the food security situation of households. Agricultural production is the most important source of income for the people of Chochman, with 80% of the households deriving an income from crop production, agricultural labour provides employment to 45% of the households. Furthermore, crop production is the primary source of income for 70% of the households.

The main crops grown in Chochman were rainfed wheat and barley. However, when the weather permits people grow melon and water melon. We have collected this data before the planting season and there is no previous data available in this area.

2003 Harvest

The average household harvested wheat in 2003 was 1,232 kg where the average harvested barley was 413.3 kg per household. The sources of both seeds ware from previous year harvest. There is no previous study done in this area and as result there is no previous data available to compare the harvest yield of this year.



The graph presents the average amount of yield retained by the household. It is disaggregated by wealth group in order to understand the relative differences in food availability by socio-economic group. No poor household was engaged by crop production. The average amount of wheat kept by the middle households was 280 kg or 40 seers with the wealth households averaging 700 kg or 100 seers. However, this graph does not represent the food situation of the people.

FOOD SECURITY PERCEPTION

Household perception of food security is an important indicator of current food security status. No households consider the food situation worse than four months ago. Two households (10%) of village people consider that the food situation was worse than one year ago. 5% of these households were from poor wealth group, where 5% was from the middle wealth group. Furthermore, 5 households (25%) reported they did not have enough to eat in the past four months. Of these (25%) households were all from the ''poor" wealth group.

Though none of the families interviewed felt that the food situation would be worse in the next 4 months or worried where their food was coming from. Many did express the view that they did not know how to think about such a matter. However, Household enumerators thought that 45% of the households did not have enough food to last through the winter. All of these four households were from the poor wealth group.

PERCEPTION OF FOOD SECURITY INDICATORS	**Percentage** out of 40 households
Consider food situation to be **worse** than 4 months ago	0
Consider food situation to be **worse** in comparison to one year ago	10
Consider food situation **not** to be **enough** in the last four months	25
Worried where their food was coming from at the time of the survey	0
Think the food situation will be **worse** in the next 4 months	0
Enumerators thought households did **not** have **enough** food for the next 4 months	45

CONCLUSION: FOOD SECURITY

In Chochman and surrounding villages, sustainable food security and is primarily a function of a household's ability to retain control over access water. The challenges and limiting factors of food security are lack of water, availability of inputs (improved seeds, fertilizer and tools), rehabilitation of village infrastructures and the services (pest and disease control, extension, credit).

Water is one of the most precious resources; the consequence of the successive and severe drought has been serious depletion of the water resources, particularly underground water. However, the drought in Afghanistan

is not over yet. Priority action required is better planning and management of water resources including river basins to ensure sustainability use of the rivers for irrigation and generation of power and national water authority.

The second most important challenge is to increase the quantity of quality seed production; to further develop the selection of improved varieties and to develop private enterprise-based national seed industry. A priority needs to be placed in developing rainfed seed varieties suitable for dry land conditions. Wheat and Barley are the major crops growing. However, legumes and maize play important roles in retaining food security in the area. Crop rotation can reduce overall risk of pests and diseases act as a buffer against low market prices, yield increase. Furthermore, it will also enhance dietary diversity which is a concern for the household's food security.

RISKS TO LIVES - CHOCHMAN

The risk to lives section of this report highlights areas in the country where individuals are more at risk of dying and understanding the reasons behind this increased risk. It particularly focuses on better understanding the links between nutritional risk, food insecurity and mortality.

MORTALITY INDICATORS:

The current crude mortality rate (CMR) of 1.92% in Chochman was above both the emergency threshold rate of 1.0 deaths/10,000 people per day and the normal developing country level of 0.5 deaths/10,000 people per day. This is higher than the normal limit for the Samanagan province zones and therefore is a significant cause for concern. Furthermore, the Chochman community does not seem alarmed at the rate of deaths during the four-month reference period, suggesting that the village has often suffered from high mortality rates. The children under five years of age mortality rate of 3.85% does not compare favourably with the stable developing rate of 1.0 deaths/10,000 people per day and is more than double the emergency threshold rate of 2.0 deaths/10,000 people per day.

Because of the high rate of maternal and child mortality, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. Of the number of children born in the last four months, the percentage of births attended by a skilled birth attendant was 10%. This figure, however, is not likely to include stillbirths or children who died during the last four months as a result of the difficulty of obtaining such information.

RISKS TO LIVES INDICATORS	Percentage (%)
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10, 000 / day)	1.92
Under 5 mortality in last 4 months (Deaths / 10, 000 / day)	3.85
Births in last 4 months attended by a Skilled Birth Attendant	10
Morbidity Indicators	
Children less than five years with watery diarrhoea (n=21)	15
Children less than five years with bloody diarrhoea (n=21)	3.8
Children less than five years with ARI (n=45)	23
Children between 6 and 59 months with measles vaccination (n=21)	84
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate) (n=21) (n=21	9.1
Children with Oedema (n=21)	0
Children between 6 and 59 months with severe acute malnutrition (n=21)	4.5
Children between 6 and 59 months with moderate acute malnutrition (n=21)	4.5
Children > 1 year and <59 months with a MUAC under 13.5 cm (n=21)	4.5
Children > 1 year and <59 months with a MUAC under 12 cm (n=21)	0
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm (n=23)	27.3
Reproductive age women (15-49 years) with a MUAC < 21.0 cm (n=23)	9.1
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt) (n=40)	0

Morbidity Indicators:
The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under five years of age at 15.4% is cause of concern. The presence of bloody diarrhoea in 3.8% of the children in the village indicates a more serious concern.

Many of the cases of diarrhoeal disease might be attributed to hygiene practices and a shortage of water. The percent of children under five suffering from Acute Respiratory Infections was 26.7%.

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MORTALITY INDICATORS:

The current crude mortality rate (CMR) of 1.92% in Chochman was above both the emergency threshold rate of 1.0 deaths/10,000 people per day and the normal developing country level of 0.5 deaths/10,000 people per day. This is higher than the normal limit for the Samanagan province zones and therefore is a significant cause for concern. Furthermore, the Chochman community does not seem alarmed at the rate of deaths during the four-month reference period, suggesting that the village has often suffered from high mortality rates. The children under five years of age mortality rate of 3.85% does not compare favourably with the stable developing rate of 1.0 deaths/10,000 people per day and is more than double the emergency threshold rate of 2.0 deaths/10,000 people per day.

Because of the high rate of maternal and child mortality, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. Of the number of children born in the last four months, the percentage of births attended by a skilled birth attendant was 10%. This figure, however, is not likely to include stillbirths or children who died during the last four months as a result of the difficulty of obtaining such information.

RISKS TO LIVES INDICATORS	Percentage (%)
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10, 000 / day)	1.92
Under 5 mortality in last 4 months (Deaths / 10, 000 / day)	3.85
Births in last 4 months attended by a Skilled Birth Attendant	10
Morbidity Indicators	
Children less than five years with watery diarrhoea (n=21)	15
Children less than five years with bloody diarrhoea (n=21)	3.8
Children less than five years with ARI (n=45)	23
Children between 6 and 59 months with measles vaccination (n=21)	84
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate) (n=21) (n=21	9.1
Children with Oedema (n=21)	0
Children between 6 and 59 months with severe acute malnutrition (n=21)	4.5
Children between 6 and 59 months with moderate acute malnutrition (n=21)	4.5
Children > 1 year and <59 months with a MUAC under 13.5 cm (n=21)	4.5
Children > 1 year and <59 months with a MUAC under 12 cm (n=21)	0
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm (n=23)	27.3
Reproductive age women (15-49 years) with a MUAC < 21.0 cm (n=23)	9.1
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt) (n=40)	0

Morbidity Indicators:
The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under five years of age at 15.4% is cause of concern. The presence of bloody diarrhoea in 3.8% of the children in the village indicates a more serious concern.

Many of the cases of diarrhoeal disease might be attributed to hygiene practices and a shortage of water. The percent of children under five suffering from Acute Respiratory Infections was 26.7%.

Measles vaccination coverage in Afghanistan is 95%, and MOH figures for the Hazrat Sultan district report coverage to be 89%. The measles vaccination coverage of 84.0% in this round of data coverage is almost consistent with other MOH figures.

Children nutritional Status:
9.1% percent of children in the sample have global acute malnutrition, which includes children under five years of age with oedema and a weight-for-height measurement below 80 % of the median of a reference population. Children with oedema are at an extremely high risk of dying and in this sample, no children were oedematous. Children below 70% are considered severely malnourished (acute) and also have a high risk of mortality. In Chochman, no children were severely wasted. However, the percentage of children under five years of age with moderate wasting in this sample is 1.9%, which does not require an urgent response.
Low MUAC measurements also indicate children at risk of mortality. The presence of 4.5% of children with a MUAC lower than 13.5 cm between one to five years of age may not be a cause for concern. No children had a MUAC of less than 12.0 cm.

Private doctor	140	Everybody	Yes

The use of health facilities has stayed constant in the last four months.

Water sources:
In Chochman, the public sources of water are hand pumps, open wells, and Kanda (small men made earth dam). The earth dams are usually located near the mosques and in most cases it is the men of the family who bring water from the dam to the household. As a result of increased health awareness, the majority of the village people prefer to get their drinking water from hand pumps rather than from either the open wells or the Kanda (which are occasionally used by animals). The people reported that both from the Kanda and open well the quality and the quantity of water available have stayed the same in comparison with last year. However, the quality and the quantity of the Hand pump have decreased in comparison from the last year.

The number one priority for the village is to get more access to clean drinking water through the construction of more hand pumps or deep wells.

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
Open well	30 minutes	Same	Same
Hand pump	30 minutes	Decreased	Decreased
Kanda	30 minutes	Same	Same

Sanitation Facilities:
There are three common types of toilets in the Chochman. Open area, vault latrine and traditional latrine. The majority of households have a traditional latrine toilet in their houses. The vault latrine is usually located in public places like schools and mosques and is always separate for men and women. The very low income households of Chochman who can not build a latrine have an open area toilet and they use the human manure as fertiliser on their crop production.

CONCLUSION: RISKS TO LIVES

The crude mortality rate is above both the emergency threshold rate of deaths people per day and the normal developing country level of deaths people per day. Furthermore, for children under 5 years of age, the mortality rate does not compare favorably with the stable developing country rate and is higher than the emergency threshold rate of deaths people per day. This survey demonstrated that the children of Chochman were in condition of poor health that is both preventable and treatable.

In Chochman, water and sanitation are completely inadequate. Presumably, the rates of both water and blood diarrhea can be attributed to these two factors. This should be improved as rapidly as possible. In addition, adequate preventative and curative health facilities and services should be available and accessible to the village community.

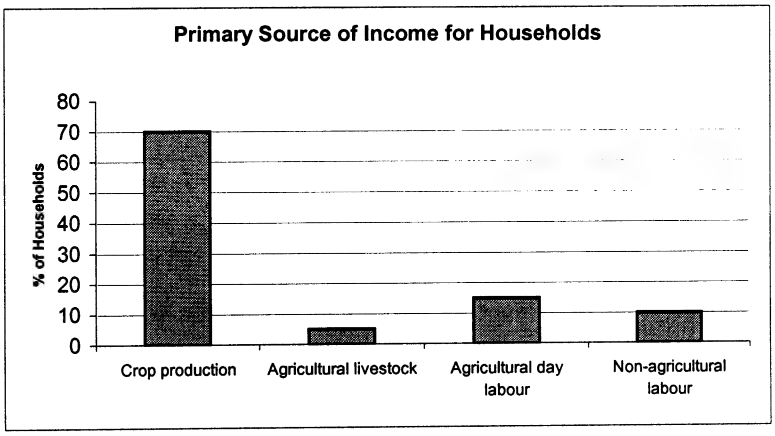
A mass measles vaccination campaign is also needed in this village. Measles vaccination coverage is poor and is probably not interrupting measles virus transmission. Moreover, community training in public health is essential as introducing the community to toilets and other sanitation programmes that will improve the condition of Chochman's health problem

LIVELIHOOD SECURITY – CHOCHMAN

The Livelihood Security section is structured to give a general overview of the livelihood strategies of the community and the households within the community. It then looks at the main livelihood strategies of these households, describing the state of the livelihood assets related to each particular income source. This section also seeks to provide indicators of current shocks to livelihood sources and households' abilities to cope with these shocks. This information is also intended to provide agencies with sufficient information to decide whether there is a need to respond to a current shock. It finishes by looking at the characteristics of households that are at high risk of being impacted by future shocks and offering recommendations on how agencies can develop household livelihood opportunities to mitigate future shocks and protect against livelihood asset depletion.

LIVELIHOOD STRATEGIES:

Crop production was the most important income source for all Chochman households, in all wealth categories, from June to September 2003. Secondary and tertiary income sources were agricultural day labour, and non-agricultural labour respectively. For "poor" and "middle" wealth groups, agricultural day-labour was the second most important income source, whilst non-agricultural labour formed a significant contribution to income in poor households only.



The table below captures the percentage of households engaged different activities, giving a sense of the relative importance of the different livelihood strategies to the community. Crop production was the primary income generation activity for 70% of households. Collecting natural resources was a source of income for 65% of households; with Agricultural labour being an income source for 45 households. Furthermore, loans and Agricultural livestock were important income sources for Chochman households.

	Percent of households with Income Source	% of Households with Women's Income Source
Spinning/ Carpets Labour	0.0	20.0
Trade / Shops	0.0	0.0
Spinning/ Carpets Business	0.0	0.0
Agricultural Labour	45	--
Agricultural Livestock	40	15
Take a Loan	30	--
Microbusiness	0	--
Agricultural Crops	80	--
Collection–natural resources	65	7.5
Formal Wage Labour	5.0	--
Informal Wage Labour	0.0	--
Remittances	--	--
Rental Income	--	--
Gifts/Gleaning	5.0	7.5
Repayment of Loan	--	--
Begging	--	--

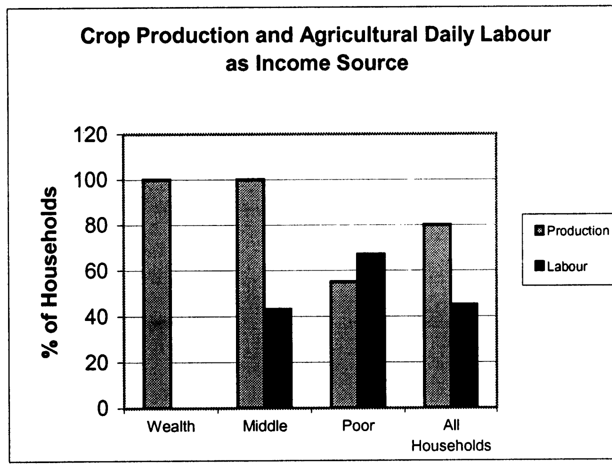
Data regarding women's income generation can clarify the role of woman in current livelihood strategies and identify potential for future involvement. Only (20%) women made carpets for wage, followed by livestock production. collection of natural resources and gifts were, equally, the third most important source of income.

Carpet labour was the greatest female contribution to household income for women of all wealth categories. In "poor" and "middle" income households carpet weaving accounted for 15% of income generation activity, compared to only 5% "wealthy" households. Only women in "wealthy" and "middle" households participated in Agricultural livestock activities.

Both trade and collection of natural resources were important income sources for "middle" and the "poor" households. Furthermore, activities most important to men tended to less important to women. However, all women received income from gifts, which men of all wealth groups did not consider an income source.

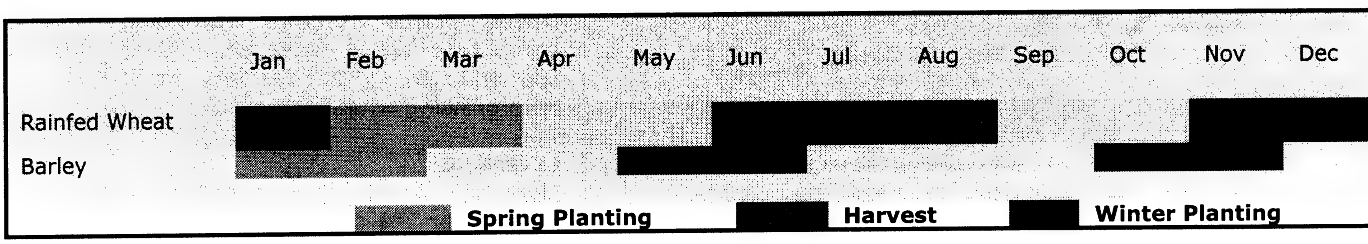
CROP PRODUCTION AND AGRICULTURAL DAILY LABOUR

Crop production, agricultural labour and collection of natural resources remain important sources of income for the majority of the Chochman residents. The graph on the right demonstrates the percentage of households of all wealth groups for both crop production and agricultural day labour.



All households were engaged in rainfed crop production. However, "wealthy" and "middle" income households tended to be oriented towards crop production rather than labour, whilst " poor" households tended to be engaged in labour rather than crop production. This can be explained by the input costs, land requirements, and water accessibility needed for crop production. "poor" households are generally less able to access these factors.

The main crops grown in Chochman are wheat and barley. The table below shows the crop calendar for rainfed wheat and barley in the area. Wheat is harvested during the months of June and July. Barley is harvested during the months of May and June. Wheat and barley are planted only in the winter.



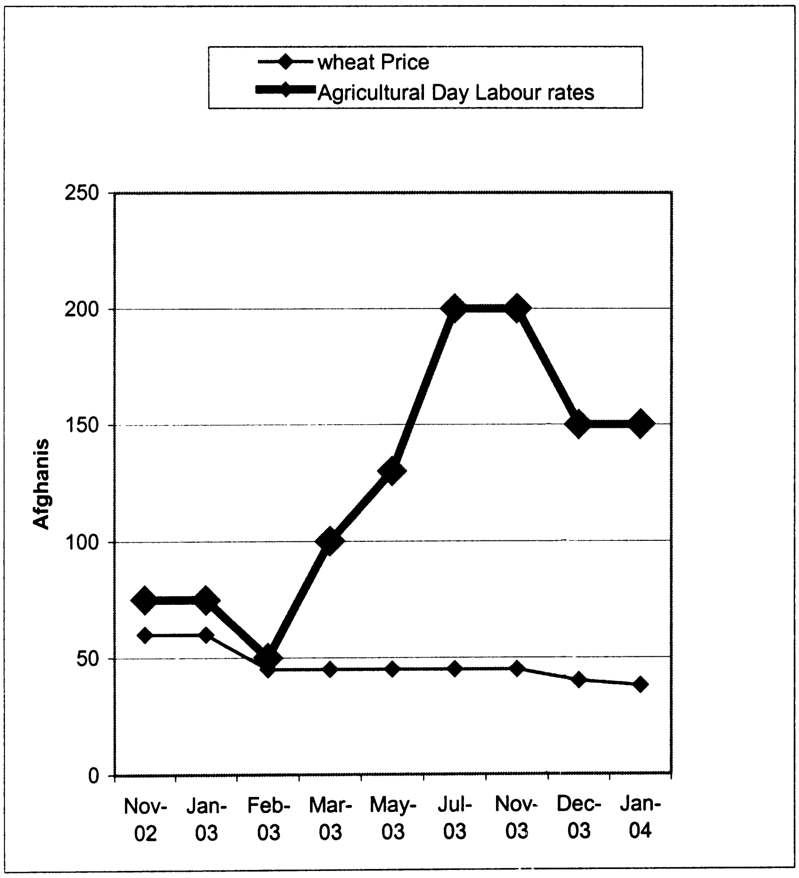
Crop Production Assets: Land Ownership and Draft Oxen

In Chochman, 85% of households own rainfed land with an average landholding of 62 Jeribs. The average amount of land own differs according to wealth. On average "wealthy" households own 25 Jeribs, "middle" income households, 28 Jeribs and the "poor", 22Jeribs. Thus, land ownership is a primary indicator for wealth differentiation in many parts of Afghanistan. Though draft oxen are extremely important to households for land preparation, affects crop production and yields. In Chochman, none of the interview households owned oxen.

	All Households	Wealth	Medium	Poor
Households owning land (%)	85	100	100	67
Average amount of land owned (jeribs)	62	25	28	22
Households owning rainfed land (%)	85	100	100	67
Households owning one or more draft oxen (%)	0	0	0	0

Shocks to Agricultural Yields

In Chochman, 5% of households reported 20 to 50% crop losses and one household had more than 50% crop losses by smuts (seed borne) diseases and leaf, stem born diseases such as rust. The leaf and stem borne diseases normally reduce yields by decreasing the photosynthetic area of the plant.



Market Prices of Agricultural Goods

In Aybak city market, wheat prices remained constant from February 2003 to January 2004. The current price of around 38 Afghanis per seer (7 kg) is slightly lower than January prices.

As the graph on the left demonstrates, agriculture day labour rates are highest during the harvest, compared to planting time (November to January).
During 2003 planting season, the daily labour wage was 75 Af's, though 2004 rates during planting have since doubled (150 Af's).

Daily labour increased from March 2003, reaching a high of 200 Af's per day from July to November 2003. This period corresponds with spring planting season and the harvest of winter crops. Should wheat prices remain depressed while agriculture labour rates are inflated, input cost will rise so that farmers are forced to stop growing wheat.

LIVESTOCK

Livestock ownership is a primary source of income for 5% of households in Chochman and 25% of households report some income generation related to livestock. Fifteen percent of women claimed income. Besides selling the livestock and household consumption, post gaaw (cow skin), post buz (goat skin) and qaraqal (sheep) skins can be sold.

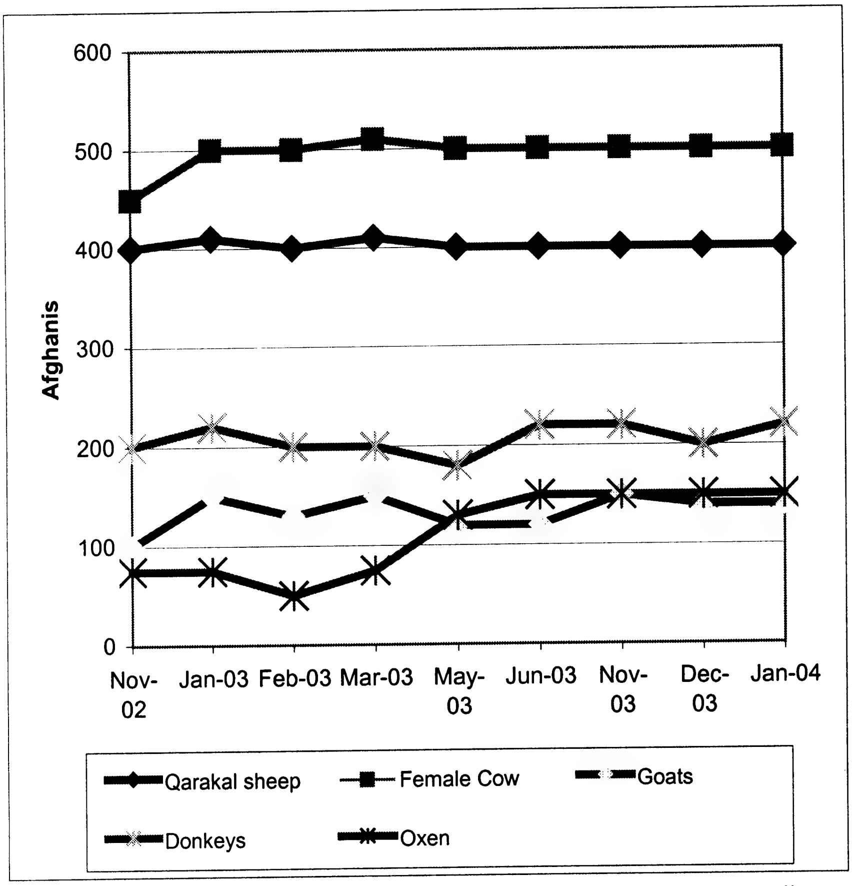
The number of animals owned by a household often indicates status within the community. Wealthier households own more animals compared to "middle" and "poor" income households. All "wealthy" households owned Donkeys and 100%. This animal is particularly important as long distance transport, water fetching and traveling to the market. In comparison, only 66% of the "poor" owned Donkey compared to 100% of "middle" income households.

	Goats	Sheep	Cows	Donke
Average Number Owned – Wealth	8.7	11.0	0.0	2.3
Average Number Owned – Middle	8.8	13.0	1.7	2.0
Average Number Owned – Poor	0.0	0.0	0.0	1.3
All households	8.7	12.2	1.7	1.8

Livestock disease

When asked about prevalence livestock diseases, the male village leaders noted that their sheep and goats were affected by Sheep Pox and their cattle had foot and mouth disease. There are a total of 1,200 sheep and goats owned by the people of Chochman, with 110 reportedly affected by Sheep Pox.

The cattle owned in the village of Chochman were 40 cows. The data shows that 87% of cattle owned by the village are affected by foot and mouth disease. Since, both of these diseases are deadly, households should have offered evidence that some of their herd had died recently, but this was not the case. Therefore, it is unlikely that Sheep Pox is as prevalent as village leaders noted. Additionally, it is unlikely that all cattle and oxen suffered from foot and mouth, though the disease has some presence in the area as it has been a problem in the past. Livestock owners in Chochman and surrounding areas have not yet had their animals vaccinated and thus their livestock are at risk of suffering from disease outbreaks.



Livestock Prices
Chochman and surrounding villages rely on the Aybak city markets livestock sales and purchase.

As seen on the left, both qaraqal sheep and cow prices remained stable from November 2002 until January 2004. However, oxen prices increased between February and January 2004. Goat prices were stable at approximately $150, with seasonal variation.

Donkeys are considered the second most important animal to own, and prices tended to remain stable around $220, though some seasonal variation existed.

Grazing land and Access to Water
According to village leaders, access to grazing land has increased in the four months prior to the survey. Grassland productivity has been similar to previous years, whilst access to water increased. However, water shortages between 1999 and 2002 did play a role in subsequent animal losses. Unfortunately, local authorities were not able to use changes in grassland and water access to predict future threats to livestock. Increased awareness of threats to grazing land access might have allowed communities to protect themselves better against drought related animal losses. In addition, common grazing land is sometimes compromised by illegal plantations of rainfed wheat. This practice can also compromise community animal stocks.

EMBROIDERY, CARPETS, GILIMS, WOOL and SILK SPINNING:

Carpet making was not an important source of income for Chochman households. However, 20% of women households claimed weaving as a source of income. According to the women, carpet weaving is engaged for both income generation and household consumption. In "poor" and "middle" income households carpet weaving accounted for 15% of income generation activity, compared to only 5% "wealthy" households. Carpet weaving for wages did not usually occur in a separate weaving unit; instead, participants were given material by an investor who paid a set rate dependent on the difficulty of the pattern and the length of carpet completed.

Furthermore, no changes in market prices or wool/silk availability were noted and input costs remained the same. However, both men and women observed that households engaged in these activities spent more time weaving.

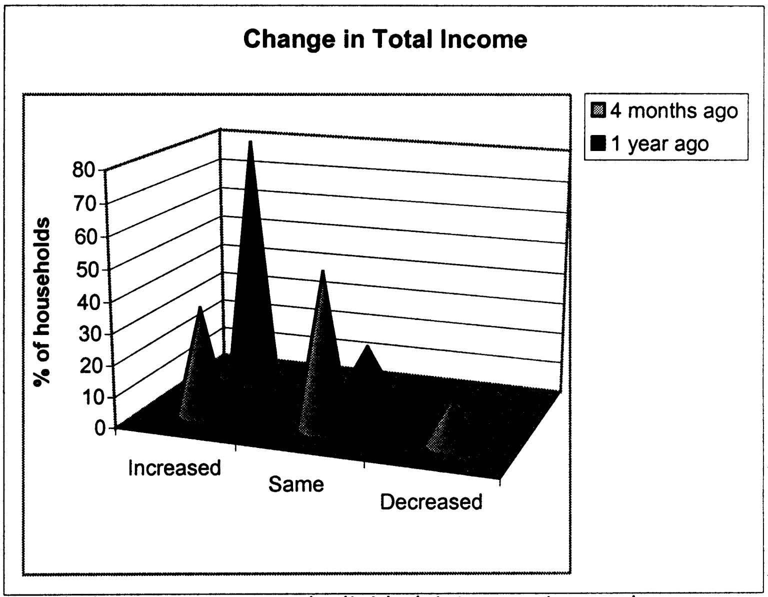
COLLECTION AND SALE OF NATURAL RESOURCES
Thirteen households were involved in the collection and sale of natural resources. One household was from "wealthy", five "middle" and seven "poor" income households. All these households collected and sold bushes and animal manure. Both livelihood activities were negatively impacted by a recent drought. Lack of rain meant bushes could not grow as well and fewer animals (reduced dung available for collection). The village did not feel the future of these resources would be compromised since the animal stocks would be replenished and bushes are cut above the root areas so they will grow back after the rains.

Non-Agricultural Labour (skilled and unskilled manual labour)
In Chochman , 40% of households identified manual labour as an income source. Most (5) households were from "poor" households, followed by "middle" income households (3). No "wealthy" households was engaged non-agricultural labour.

OTHER INCOME SOURCES

The only other main income_sources in Chochman were loans. Loans were a major source of income for 30% of the households. Most households with loans were" poor" households.

CAPACITY TO COPE: COPING STRATEGIES



As seen on the right, 50% of all households reported stable income over recent month, while 35% of households reported an income increase and (15%) of houses experienced a drop in income). This contrasts with last year's trend where most households (80%) reported increased income compared to only 35% in the last four months. This instability in income rates suggests some insecurity. However, decreased income rates were not associated with common activities, thus these trends might be attributed to normal variation rather than a specific shock.

The household coping strategies included here were not meant to include all possible options a home might exercise to survive tough times. The activities chosen were meant to reflect easily measured behaviours that might predict declining livelihood and food security in Afghanistan. The chosen behaviours were sub-divided into erosive and non-erosive coping strategies to better understand the effect of household coping behaviours on future livelihood security. The division of behaviours cannot be considered mutually exclusive as some non-erosive behaviour (selling motorcycle, bicycle etc.) might affect future opportunities. Similarly, the list does not reflect a continuum of behaviour, but general indicators of a worsening situation. However, some households experiencing chronic or transitory poverty may also periodically use these strategies.

Non-Erosive Coping Strategies (last four months) (n=20)	**Percentage**
Household member migrated for labour	5
Sons sent to work as indentured labour	5
Household members worked more hours to make daily expenses	30
Households who borrowed food from relatives to make a meal	25
Sold Carpet / Gilims from the house	15
Sold house part (windows, doors, roof beams)	5
Consumption of dried bread	15
Erosive Coping Strategies (n=20)	
Household took out loan	30
Households who took food on credit from local shop	45

Non-erosive coping strategies

In order to meet expenses, 15% of households sold non-productive assets such as carpets/ gilims. These sales are often linked to preparation for the winter season. Other common strategies include working longer hours (30%), household member migrated for labour (5%), sold house part (5%) and Sons sent to work as indentured labour (5%). Food sources and consumption patters are also key indicators of vulnerability.

Of the families interviewed, 15% consumed dried bread, a clear indication of food insecurity. Other than food consumption changes, most families needed external support to find sufficient food. Most households (25%) were forced to borrow food from relatives to make a meal in the last four months.

Erosive and distress coping strategies

It is apparent that strategies adapted by households to deal with shocks varied with individuals, households and villages. In Chochman, 30% of households took loans as a coping strategy to meet daily expenses. All households were from the ''poor' income households. Many households (45%) required credit from local shops in order to obtain sufficient food. It is apparent that both ''poor" and ''middle" households are extremely vulnerable as they jeopardize future production capacity to cover immediate needs.

Income Diversity and Capacity to Cope – Risk to Livelihoods

	Average Income Diversity Score
Wealth	3.3
Middle	3.1
Poor	2.3
All households	3.1

Coping mechanisms can be defined as the capacity of households to absorb shocks and to adapt to stresses induced by climate, price instability, unemployment and complex emergencies such as political crisis. However, households with various income sources are better able to cope than households who rely on only one or two income sources. The income diversity score is simply a count of the number of income sources for each household. In Chochman, households have an average income diversity score of 3.1. In many cases the wealthier household often score higher income diversity measures, however, in this situation both "wealth" and "middle" households groupings have a similar score of 3, whereas "poor" households score was 2. The main sources of income in Chochman were crop production, collection and selling of natural resources, agricultural day labour, non-agricultural labour, livestock and loans

CONCLUSION - LIVELIHOOD SECURITY SUPPORT

Sustainable livelihood requires citizen's participation and programmes that will promote and enable the people to make decisions on issues that affect them and their immediate surroundings. Rebuilding village livelihoods is a diverse and huge undertaking that calls for multi-sectoral interventions in society. However, its primary use is therefore to choose between these many interventions. The programmes, therefore, should be appropriate for the different agro-ecological zones and community skills. Revitalization of agriculture and alternative livelihood sectors are the main subsets of the broad households view and it is the central issue of sustainable livelihood security of "poor" households in Chochman and surrounding villages.

As data shows, 50% of all households reported stable income over recent month, while 35% of households reported and income increase and (15%) of houses experienced a drop in income. This contrasts with last year's trend where most households (80%) reported increased income compared to only 35% in the last four months. This instability in income rates suggests livelihood insecurity and is declining.

Further more, 30% of households engaged in longer hours of work and 15% of families interviewed had been eating dried bread, which clearly highlights food insecurity. In addition to changes in food consumption, some families needed external support to food needs. 25% of families had to borrow food from relatives in order to make a meal in the last four months. In the same way, up to 45% of households took food on credit from local shop or bakery. Other common strategies include households sold non-productive assets such as carpets/ gilims, Sons sent to work as indentured labour and household member migrated for labour.

The following supports are immediately needed in this sentinel site and the surrounding villages.

1. Water intervention is needed firstly for community consumption, health and hygiene needs.
2. Cash for work will help the food security of this community.
3. Emergency Food aid is needed for the "poor" and "middle" households of Chochman village, however food insecurity does not always equate with food aid needs. Food security can be achieved, if the farmers' inputs are available in the bazaar. However, supplementary feeding with essential drug treatments like vitamin A and Iodine to vulnerable households is needed

The priority support to improve the livelihood security of this sentinel site is rapid revival of the crop production by ensuring the following:

1. The availability and distribution of inputs (improved seed, fertilizer, tools). Furthermore, a priority needs to be placed in developing quality improved staple food seed varieties that is suitable to the local environment conditions.
2. Shortages of water have impacted negatively on health, hygiene and livelihood security. Food security in Chochman today is primarily a function of the household's ability to retain control over access water.
3. Capacity building though information transfer of technology is a need to train the farming community in this area.

Samangan Surveillance Unit

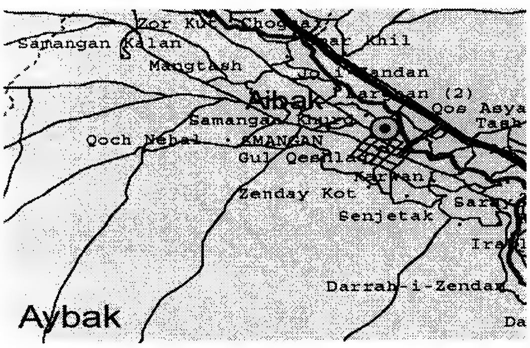
National Surveillance System (NSS)
Transitional Islamic State of Afghanistan
Ministry of Rural Rehabilitation & Development, Ministry of Agriculture & Animal Husbandry & Ministry of Health

Aybak District
- Dara-e-zandan Sentinel site

Fall 2003

SUMMARY FINDINGS FOR DARA-e-ZANDAN SENTINEL SITE IN SOUTH EAST OF AYBAK DISTRICT (These findings are based on field survey of 20 households and Dara-e-zandan village leaders interview. These findings should not be assumed to be representative of other parts of Afghanistan)

Afghanistan
Samangan Province



Contents of Bulletin

Food Security

- None of the households consider the food situation worse than four months ago or one year ago. Furthermore, 60% of households felt they were not able to buy/cultivate enough food in the past four months. Though none of the interviewed households thought the food security would worsen over the next four months, though many expressed uncertainty about how they could predict changes in food security in their home. However, household enumerators thought that 55% of poor households did not have enough food to last through the winter.
- Dietary Diversity is a concern of "poor" income households in the village. However, these concerns are based on the frequency of consumption reported by households.

Risk to Lives

- The crude mortality rate is not above the emergency threshold rate (1 deaths/10000 people per day) and the normal developing country level (0.5 deaths /10000 people per day). Furthermore, for children under five years of age, the mortality rate (0.5 deaths/10000 people per day) does compare favourably with the stable developing country rate (1.0 deaths/10000 people per day) and is less than the emergency threshold rate (2 deaths/10000 people per day).
- Morbidity patterns of children under five years of age were very common problem (ARI: 50%, watery diarrhoea 33% and bloody diarrhoea 6%)

Livelihood Security

- Less than half (45%) of all households reported stable income over recent month, while 50% of households reported an income increase and (5%) of houses experienced a drop in income). This does not contrast with last year's trend where half of households (50%) reported increased income. This stability in income rates suggests some security.
- No major shocks have impacted the livelihoods of households in Dara-e-zendan relative to other parts of Aybak district which are less well off.

What is the NSS?
The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs.

Methodology
The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the communities with respect to agro-ecological features, economic activities, available services and people in a given area (livelihood / agro-ecological zone). Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel may not be representative of every village in the zone. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same zone (See Annex I for detailed information on methodology).

18

OBJECTIVES OF REPORT

- Provide current information on household food security status in Aybak District
- Provide information on risk to lives and nutritional risk of individuals in Aybak District
- Provide information on the current household livelihood security situation in Aybak District, specifically looking at current shocks to livelihoods and the ability of households to adapt to (cope with) these shocks
- Develop a better understanding of the vulnerability and risk of communities and households in Aybak in relation to issues of food security, mortality, health and nutrition.

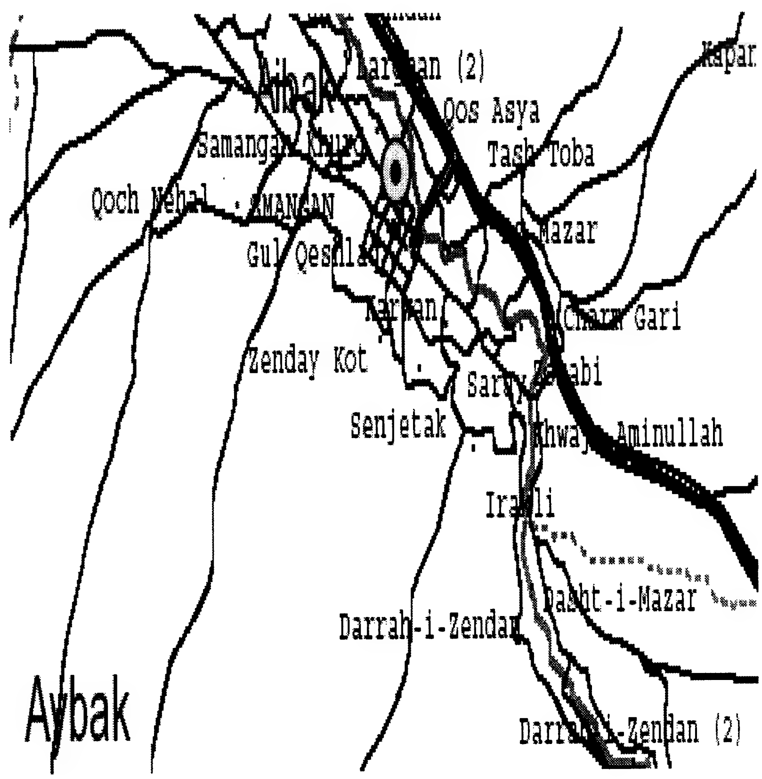
Additionally, this report provides baseline information on indicators that are unique to a local area and have not yet been explored in the depth needed for use in guiding programmes and policies. They are:

- Characteristics of household wealth in Aybak District
- Livelihood Strategies employed in Aybak District
- Presence of morbidity, mortality and malnutrition in rural communities in Aybak District

And finally, the report aims to provide information on how government and other agencies can use this increased understanding of livelihoods, vulnerability and risk in order to design and prioritise effective policies and programme interventions.

LIVELIHOOD ZONES FOR AYBAK DISTRICT

Livelihood zones in Aybak District can be divided into three distinct agro-ecological areas. These distinctions impact household livelihood patterns, and one sentinel site was selected from each area. Most of the province consists of mountainous, rainfed farmland and irrigated valleys. However, this report will focus only two agro-ecological zones and report includes information on the sentinel site from zone one and two.



Zone one: Irrigated land: (21 villages): Dara-e-zandan: This zone covers South East of Aybak city. These communities share similar livelihoods and are located in river/canal-irrigated valleys. Access to water generally includes canal water from Samangan river that is used for both irrigation and household consumption. Wheat and barley are the main crops. Horticulture crops and fruit trees are also common crops growing in this sentinel site.

Zone two: Mountainous and flat rainfed vally land: Zone two covers 65 villages Northeastern part of Aybak city. The communities share similar livelihood and are located higher mountainous land and downstream valleys. The source of water is rainfed, the main crops are wheat and barley.

Samangan Province is in Northern Afghanistan. It shares a border with Kunduz to the North and is bordered by Baghlan to the East and Bamyan to the South and Balkh and Sari Pul Provinces to the West [*Appendix 2: Map showing rural poverty by province*]. Samangan consists of five districts: Aybak, Khuram Sarbagh, Roy-I-Duab, Dar-I-Suf and Hazrat-I-Sultan. Aybak city is located in Aybak district and is the provincial capital. It is on the Mazar-Kabul highway and is 120km SE of Mazar. It is situated in a wide valley between the mountains of Chagat to the North, Kohi Bas to the South and Dal Khaki to the West.

Demography
The population of Samangan is approximately 318,500 and is of mixed ethnicity. The Tajik and Uzbek population make up 60%, Pashtun 20%, Hazara 15% and Turkmen 5%. The population of the main city of Aybak is 21,786, the Aybak district population is 87,670.

Socio-economic Information
The main source of income for the area is from agriculture, clerical work, teaching and retail. For women, income is gained through skilled work such as tailoring, embroidery or weaving, or through domestic activities such as washing clothes, cleaning and vegetable production. There is a high incidence of poverty and many families lack basic necessities such as adequate shelter, food and water.

Administrative System and Political Affiliations
The civil war in Afghanistan can be described as a complex political situation. The ethnicised conflict is embedded in, and is characterized by loyalty to one particular ethnic group military leader and strong antipathy towards other ethnic group leader. Administrative, political and military power holders often play a fundamental role in determining access to resources. The overriding issue of the conflict in Northern Afghanistan is the power struggle between Jamiaat military party and the Jumbesh military political group. After the fall of Taliban most of Samangan province has been a loyal to Jumbesh military power and the Samangan governor who is Samangan Jumbesh party representative. However, there is a presence of Jamiat military group control in some area of the province. Sometime, the area are characterized by a high attention of fighting, violence for the presence of both armed forces.

Aybak District
Located in the center of Samangan province, Aybak has irrigated land area of 7553 hectors (ha) and 41471 ha of rainfed land with population of 87,670. Specific vulnerabilities have evolved due to decades of conflict and political instability. Communities here are characterized by weakened or non-existent institutions, high susceptibility to violence, forced displacement of people, denial of basic human rights to some groups within the community and high livelihood vulnerability. Drought has compounded the challenges faced by communities and Aybak residents have recently lost livelihood resources (stocks and assets) and basic livelihood strategies (agriculture, wage labour, trade and outcome living) have been drastically undermined. Food security remains uncertain in most rural communities, as does livelihood security and personal security of individuals. Study of these trends will allow insight into the natural resilience of community livelihoods.

GENERAL DARA-e-ZANDAN INFORMATION

	Average Household Size
Wealth	**6.0**
Middle	**6.3**
Poor	**6.0**
All Households	**6.1**

Dara-e-zadan, was the sentential site to represent the 21 upstream villages of the surrounding South east site of Aybak city and is located altitude of 1230 meter. Dara-e-zadan is Tajik word and means jail. The majority of this settlement and surrounding area are Tajik and the dominant (99%) language is Uzbek.

This village has 600 households in the settlement. The 600 households have 10 mosques and each mosque belongs group of households together. Of these 600 households, 51% are male and 49% women. Household size in Dara-e-zadan differs with wealth, with an average household of 6 members per household. The community defined a household as a group of individuals who live in the same house and share consumption and expenditure. Household size in Dara –e-zadan for all wealthy households size is 6 member per family

The Qaruadar (village leader) Haji Qayoom of Kallan Mosque (the biggest mosque of the village which has 52 household), has been chosen by the people of this village as a village leader. The leader of the village with the *shura*(elders) group make all the decisions and make facilities for the community. Usually, all disputes within the village are settled by a group of village elders. They have administrative links to the Aybak district, which is 1 hour away by foot. The district governor is responsible for his district to the provincial centre, at this point, Aybak.
In Dara-e-zadan village has one primary (1 to 6th grade) for both boy and girls, inter-medium school (6th to 9th grade) is only for the girls and high school (7 to 12) for the boys. The village girls if they want to continue high school they have to go to the Aybak city high school. It is normal practice in the village girls can not continue in high school in the village. School has four classes and each class has between 40 to 50 students both for girls' class and the boys' class. The total number of Students is 1015 Students. The teachers of both girls and boys in this school are males and most of them are from the village and Aybak city.

Most of households have a high number of dependants, particularly children and economically active unemployed immediate relatives. However, the average household size and dependency ratio is higher in Dara-e-zandan like the rest of the district.

Further more, social networks are essential for livelihood strategies. Women play a major role in reproductive and household's affairs. Children often help women with accomplishing some of their responsibilities. Men have more authority than women. Some men are engaged in waged employment. It is the men who have control over the large agricultural activities and who are involved in local community politics at ethnic or tribal authority level.

Gender was found to be critical in the household structure and processes that relate to rural livelihood security. The data shows unequal gender relations at household level. To a large extent, household headship determines the access of the household to assets and resources, division of labour, decision-making, power and livelihood strategies.

Female-headed households tend to diversify their activities to earn income in cash and in kind. Gender was identified as an important factor in using indigenous knowledge in enhancing livelihood security. Both men and women were found to possess indigenous knowledge. Women's indigenous knowledge is essential for ensuring household food security, maternal health and child care and income generation through weaving fiber clothes, production of carpets, and handicraft. Their knowledge is not limited in food production and post harvest processes. men utilize their indigenous knowledge in agricultural production, carving and traditional medicines .

	Wealth Group		
Assets and Activities	**Wealthy (15%)**	**Middle (30%)**	**Poor (55%)**
Male Group perception			
Land	50-100 Jeribs	15-30 Jeribs	0-5 Jeribs
Sheep/goats	20-30	5	None – 1
House	1-2 rooms	1 room	1 room
Donkey	1-2	1	0-1 (own or borrow)
Water	Collect with donkey	Collect with donkey	Collect with donkey
Carpet	1-3	1-2	0-1
Gillim	2	1	1-2
Travel	Mazar or Aybak Market	None	None
Employment	People work for them	Does own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to the poor households	None	Receives Zaqat
Female Group perception			
Land	50-100 Jeribs	25-50 Jeribs	0-10 Jeribs
Sheep/goats	15-20	15-20	1-5
House	3 rooms	2 room	1 room
Donkey	2	1	0
Carpet	4-5	2-3	0-1
Iranian carpet	1-2	1	0
Gillim	3-4	2	1
Travel	Aybak	None	None
Employment	People work for her	Does her own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to Mullah	None	Receives Zaqat
Clothes	Has several dresses	Has some dresses	Has less dress
Jewelery	Has many coins, a watch and bracelets	Has some coins (not silver)	Has none or two

The community categorized households into three different wealth groups, or socio-economic categories. The table on the right describes the type of features characterizing each wealth group and the percent of households falling in each category.

These socio-economic groups will be used throughout the report to understand how food security, livelihood security and risk to lives may be different for households of different socio-economic status. There is a large difference in the household size between the wealthy and the other two groups that the enumerators attribute to a few different reasons.

It is seen that the rich men have more than one wife at a time and so bear children from both wives and that the sons of rich families do not separate from the family after marriage. In addition, members of poorer families may migrate to find work and so contribute to a smaller family.

Wealthy Households: 45 percent (9 households)

A household who have access to land and livestock.
--women--

A household who have rainfed land and having more than 40 sheep, goat, camel, donkey and cow.
--men--

Middle Households: 20 percent (4 households)

Limited land, livestock *(14-20), a self employed household, who do not seek help from others.*
--women--

A households who have more than 10 to 20 Jeribs of land and have limited livestock, home and donkey
--men--

Poor Households: 35 percent (7 households)

A poor Household is some one who work for the others and do not have an access to land and does not have donkey.
--women--

Daily labour who works for others, have no access to land and have no livestock.
---men----

Sharik yar is situated in a remote rural area where the general service provision for basic needs such as clean water supplies, sanitation, education, health, communication is very poor. There are also fewer opportunity to diversify income sources. Consequently, households depend very much on the natural resources base for food, health remedies and materials for making crafts for income-generation without much attention to sustainability issues.

There has been some identification of important determinants of vulnerability to food crisis faced by village poor households and enumerate their coping mechanisms. Households suffer because of inadequate agricultural production. The village location is characterised by combination of difficult situations that contribute to their vulnerability and poverty. Some of the common problems are hilly topography, poor soils, low and erratic rainfall, poor infrastructure. Vulnerability and poverty among the households is endemic in Sharik yar.

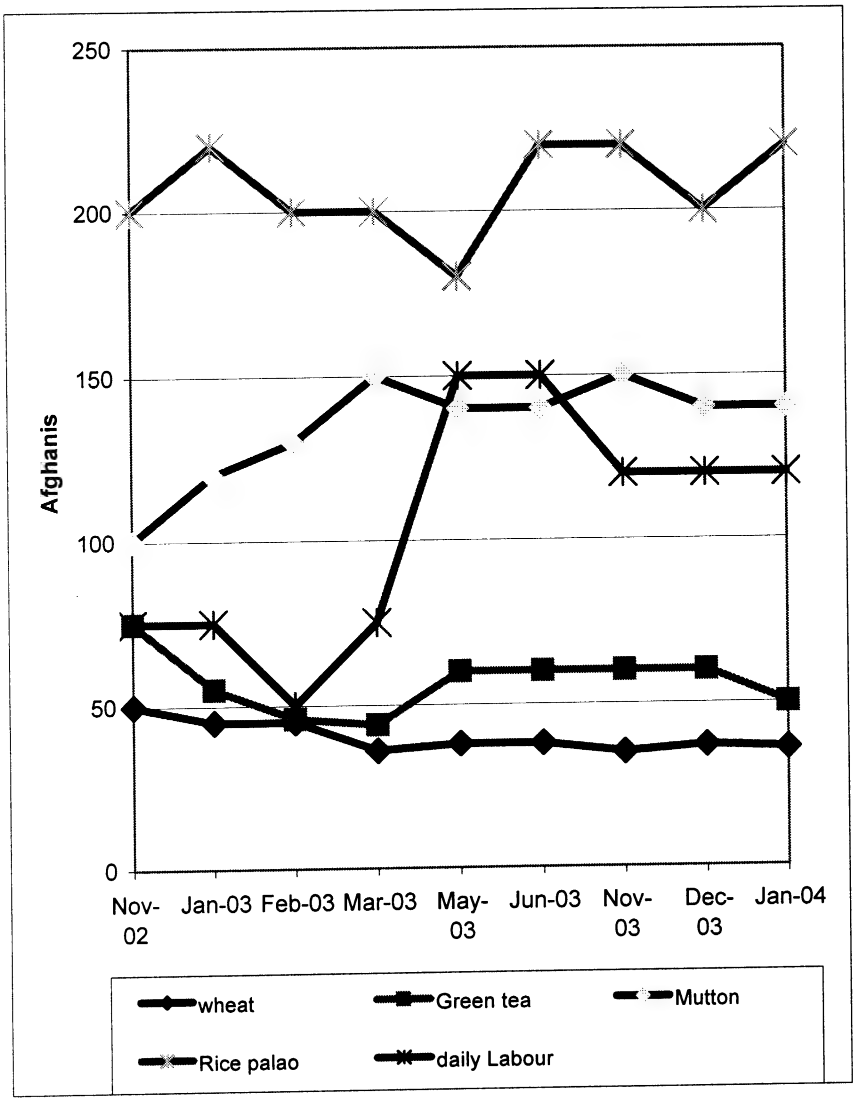
22

FOOD SECURITY – Sharik yar

MARKET ACCESS

Location of Market	Time taken to reach market		Cost of getting to market	Market Accessible in winter
	Vehicle	Foot		
Aybak City Market	2 hours	3 hours	150 Afs	Yes

Aybak city is the closest food market to Sharik yar, accessible by foot or Vehicle (two hours by foot or donkey).The road buil by GOAL is in relatively good condition. According to this survey, some travel by vehicle (150 Af's per trip) but this cost may vary according to the person's location in the village. Most Sharik yar residents access Aybak market to trade wheat and livestock, and also purchase food and non-food items. The largest trade by women is carpet sales. Market transactions are cash based and most households send one person to the market on market days (Mondays and Thursdays, weekly). The market is open year-round and is one of he most important trading for local districts, Samangan and the surrounding provinces.



MARKET PRICES

Sharik yar households rely on Aybak market for food and non-food items, 50% of households purchase wheat. Wheat prices have been stable over the past year and impact daily labour rates since many workers are paid wheat for work. When prices decrease, whilst labour rates increase, it becomes more profitable to work for wheat compared to growing own crop.

As shown on the graph to the left, wheat and grean tea prices have been stable this year. However, daily labour rates increased from March 2003 reaching a peak of 200 Af's per day in June. Rates then began decreasing in November. The same trends held for both rice and mutton. Rice reached a peak of 220 Af's per Kg from January, June and November 2003 and January 2004. Mutton prices reached a maximum price of 150 Af's in January, March and November 2003.

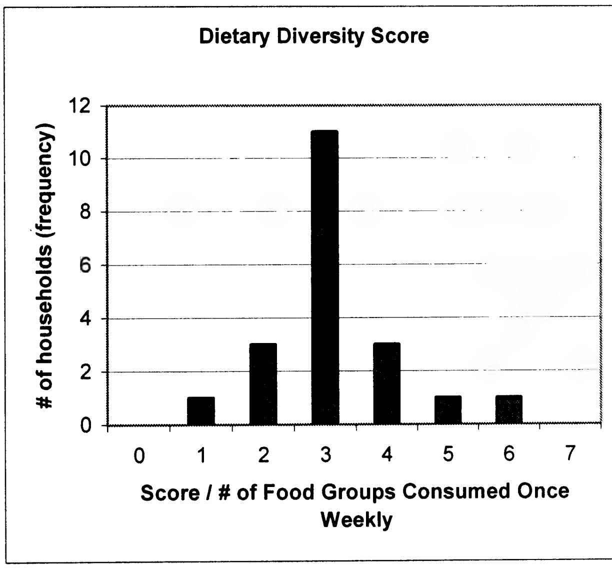
Mutton and rice increases directly impact village food security since these are staple food items. Households also purchase vegetable items (potatoes, spring onions, okra and carrots) from Aybak market: prices have remained steady. There are seasonal shortages of some vegetables, though this does not seem to impact vegetable prices nor is demand increased during off-season. Households simply purchase what is available at that time in the market.

DIETARY DIVERSITY – DIET QUALITY

Dietary diversity is a major component of food security. Previous studies show that Afghani dietary habits are not normally diverse and consequently, there is an increased risk of micronutrient deficiency disorders and related diseases. It is not entirely clear how dietary preferences and food availability interact to determine household diet patterns. To better understand diet quality over the past four months, surveyors asked householders how frequently they ate foods from different food groups. These results were summarized in a

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The diversity score is calculated by attributing **a score of "1" to each food group that was eaten at least once weekly** by the household. Households with a higher diversity score have a more diverse diet. Surveys repeated throughout the country indicate that most households consume cereals or grains on a daily basis and thus, cereals were not included in the diet diversity score. On average all households combined in Dara-e-zandan had a dietary diversity, score of 3.2. Most (11) of 20 households scoring "3", 3 households scoring "2" and "4".

Diversity scores improved with increased wealth with a relative scores of 4.1, 3.2 and 2.7 for "wealthy", "middle" and "poor" households respectively. These results suggest that "wealthy" households either have the means to buy more expensive foods or, have acquired a preference for a more diverse diet. As some households had scores of six and seven, it suggests that a variety of food groups are available from the Aybak city market. However, it is uncertain if the varieties of food available are seasonal, imported during the off-season or, produced locally.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households. The data shows that all households are eating protein rich foods (meat, milk, eggs, and pulses) at least once a month to once a week to complement cereals (wheat and barley). However this data does not allow inferences regarding protein sufficiency.

Household protein choices differ according to wealth. "Wealth"" households eat meat once a week, whereas "poor" households eat meat one a month and "medium" two to three times a month. "Wealth" households drink milk two to three times a month compared to once a month in "medium" and less than once a month for "poor" households. "Wealth" households have eggs once a month whereas "poor" and "middle" households did not have eggs for the last four months. "Wealth" and "middle" households eat pulses two to three times a month while "poor" eat pulses only once a month. Adequacy of protein intake cannot be inferred from this data, although a decrease in the frequency of protein food choices per month in households might indicate a decline in food security and increased poverty.

In the last four months, all households seem to be eating vegetable. "wealth" households eat vegetable three to five times a week, whereas "middle" eat vegetable twice a week and "poor" households eat vegetable once a week. Other vegetable of potato, okra and onion, all wealth households eat three to five times a week. "Wealth" and "middle" groups eat fruits twice a week and "poor" wealth group seem to be eating once a week.

As data regarding quantities and consumption practices were not collected, no inferences can be made regarding the adequacy of vitamin and mineral intakes. Nonetheless, this data suggests some areas needing additional research include:

1. Vitamin A sufficiency (animal sources and beta-carotene from plant sources);
2. Calcium sufficiency (milk and water, most water is hard, sources), and;
3. Vitamin C sufficiency (fresh plant sources).

These concerns are based on the frequency of consumption reported by households and the limited availability of these foods compared to other items.

24

Average Frequency of Food Group Consumption by Wealth Group

Wealth Group	Meat	Milk, Yogurt, Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other Vegetables	Fruits	
Wealth	4.0	2.7	2.0	3.3	6.0	6.0	5.0	1 = Never Eat 2 = Once a month or less 3 = 2 to 3 times a month 4 = Once Weekly 5 = Twice Weekly 6 = 3 to 5 times Weekly 7 = Always
Middle	2.5	1.8	1.0	3.0	4.8	5.8	4.7	
Poor	1.8	1.2	1.2	1.6	3.7	5.6	3.8	
All households	2.4	1.6	1.3	2.3	4.4	5.8	4.3	

CROP PRODUCTION

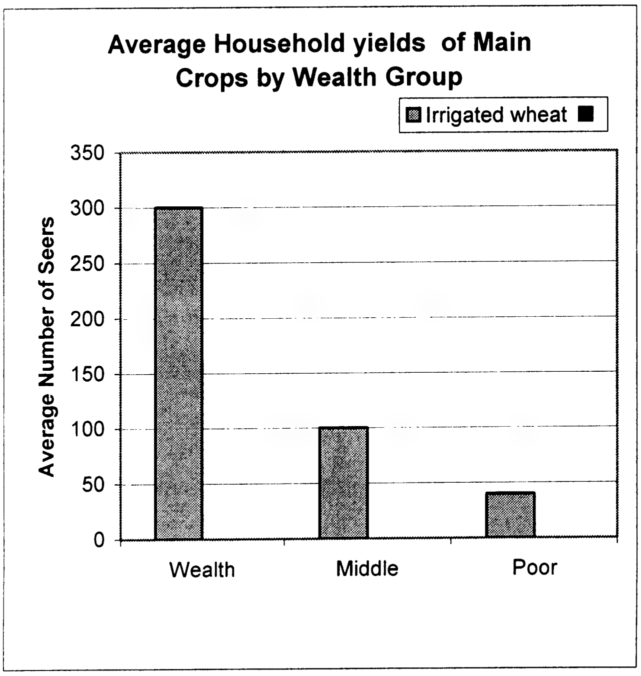
Rural and semi-rural areas in Afghanistan remain highly dependant on subsistence agriculture for households consumption, monitoring annual crop yields versus amount planted can help predict the food security of households. Irrigated and rainfed Wheat and Barley are the staple crop growing in this areas. In Afghanistan, Irrigated land produce 93% of total production, whilst rainfed produce the remaining 7% (FAO report). In Dara-e-zandan, agricultural production is the second most important source of income with 50% of households engaging crop producing.

2003 Harvest

The average amount of wheat harvested per poor household in Dara-e-zandan for the 2003 harvest season was 40 seers (280 kg). According to FAO report in 1999, Afghanis consume per capita more wheat than average, about 61 grams per day or 220kg per year. The annual wheat production required for Aybak districts population of of 87670 people estimated to be 19,300 metric tonnes per year. This is not included amount of seeds of households will keep for planting next growing season.

Location	Wheat		Barley	
Samangan province	Cultivated land	2002-2003 Yield/ha	Cultivated land	2002-2003 Yield/ha
Irrigated land	13440 ha	1282 kg/ha	370 ha	1137.5 kg/ha
Rainfed land	16700	455 kg/ha	200 ha	630 kg/ha

Traditionally, Afghan farmers have produced their own seed by saving and selecting part of their harvest for the next growing season. This practice is still dominant in most of the country. Seed varieties and shortage of fertilizer are frequently quoted as reasons for declining yields. Furthermore, farmer of this area believes that most indigenous varieties are low yielding and susceptible disease. However, there is no research supporting this and the farmers do not know, if the new varieties will have same yield with time either.



As some households are sharecroppers or rent their land, the amount of yield kept by households can differ from the actual harvested. In Dara-e-zandan, only 16 households own their land (an average land holding was 66 Jerbis).

The graph on the left, presents the average amount of yield retained by the household. It is disaggregated by wealth to understand relative differences in food availability by socio-economic groups. However, the data shows that wealthy households are not engaged in crop production. The average amount of wheat kept by the "wealth" households in 2003 harvest period was 300 seers, where as "middle" households averaging 100 seers (1 seer=7kg), and "poor" income households averaging 40 seers. However, this graph does not necessarily represent the food security.

25

FOOD SECURITY PERCEPTION

Household perception of food security is strongly related to actual food security. Twelve households (60%) felt they were not able to buy/cultivate enough food in the past four months (45% of these were "poor", 10% from the "middle" and 5% "wealth" households). None of the household felt their situation was worse compared to one year or four months ago. Nonetheless, Enumerators observed that eleven of the "poor" households and two households from the "middle "did not appear to have enough food to survive the winter. None of the interviewed households thought the food security would worsen over the next four months, though many expressed uncertainty about how they could predict changes in food security in their home.

PERCEPTION OF FOOD SECURITY INDICATORS	**Percentage** out of 40 households
Consider food situation to be **worse** in comparison to 4 months ago	0
Consider food situation to be **worse** in comparison to one year ago	0
Consider food situation **not** to be **sufficient** in the last four months	60
Worried where their food was coming from at the time of the survey	0
Think the food situation will be **worse** in the next 4 months	0
Enumerators thought households did **not** have **enough** food for the	65%

CONCLUSION: FOOD SECURITY

Dara-e-zandan and surrounding villages are not in a position to be food secure through its own production at present. Food security in the rural community has been considered to be largely a function of stable crop production and obviously there is room for improvement. In Dara-e-zandan, 50 % of households are engaged crop production while the other 50% of households are engaged a hostile occupations in order to secure a meal. Furthermore, in Dara-e-zandan, poor households were living below the poverty level and could need for long term development projects to secure the food situation.

Food security is defined as the condition whereby everyone has at all times access to and control over sufficient quantities of good quality food for an active and health life (World Bank 1986). It is composed of access to food and availability of food. In Dara-e-zandan, there was no access to food for all households and there was not enough food for the "poor" households. For all household categories, each group has adapted their own coping strategies to deal with their food situation, but the common practice of poor households were reducing their household consumption by skipping meals, eating dry bread or poverty food.

Despite the conflict, prices of staple food crops and currency exchange rates under the Taliban were relatively stable. The new administration was accompanied by an enormous appreciation of the afghani currency by approximately 60%. The main markets are sensitive to these economic trends. Prices of staple food crops (rice and mutton) are continuously increasing because of exchange rate fluctuation. However, the price of wheat is continuously decreasing (1 Kg of wheat is $1 where the FAO price value of 1kg wheat seed is $18 in Afghanistan). The price increase has an impact for the community dietary diversity and is a common concern for the future nutrition of the elderly, women and children of this village.

The following supports are immediately needed in this sentinel site and the surrounding villages.

1. Water intervention is needed firstly for community consumption, health and hygiene needs.
2. Cash for work will help the food security of this community.
3. Emergency Food aid is needed for the "poor" and "middle" households of Dara-e-zandan and the surrounding villages, however food insecurity does not always equate with food aid needs. Food security can be achieved, if the farmers' inputs are available in the bazaar.

The priority support to improve the food security of this sentinel site is rapid revival of the crop production by ensuring the following:

1. The availability and distribution of inputs (improved seed, fertilizer, tools). Furthermore, a priority needs to be placed in developing quality improved staple food seed varieties that is suitable to the local environment conditions.
2. Shortages of water have impacted negatively on health, hygiene and food security. Food security in Dara-e-zandan and the surrounding areas, today is primarily a function of the household's ability to retain control over access water.
3. Capacity building though information transfer of technology is a need to train the farming community in this area.

RISKS TO LIVES – DARA-e-ZANDAN

The risk to lives section of this report highlights areas in the country where individuals are more at risk of dying and understanding the reasons behind this increased risk. It particularly focuses on better understanding the links between nutritional risk, food insecurity and mortality.

MORTALITY INDICATORS:

The current crude mortality rate (CMR) of 0.5 in Dara-e-zandan is not the above the emergency threshold rate of 1.0 deaths/10,000 people per day and the normal developing country level of 0.5 deaths/10,000 people per day. Furthermore, children under five years of age mortality rate of 0.5 does compare favourably with the stable developing rate of 1.0 deaths/10,000 people per day and the emergency threshold rate of 2.0 deaths/10,000 people per day.

Because of the high rate of maternal and child mortality in Afghanistan, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. Of the number of children born in the last 4 months, the percentage of births attended by a skilled birth attendant is 40%. This seems to be an acceptable percentage in this village. This figure, however, is not likely to include stillbirths or children who died during the last four months as a result of the difficulty of obtaining such information.

RISKS TO LIVES INDICATORS	Percentage (%)
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10, 000 / day)	0.5
Under 5 mortality in last 4 months (Deaths / 10, 000 / day)	0.5
Births in last 4 months attended by a Skilled Birth Attendant (n=8)	40
Morbidity Indicators	
Children < 5 years with watery diarrhoea (n=45)	33.3
Children < 5 years with bloody diarrhoea (n=45)	5.6
Children < 5 with ARI (n=45)	50.0
Children between 6 and 59 months with measles vaccination (n=42)	94.4
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate) (n=42) (n=26)	-
Children > 6 months and <59 months with Oedema (n=42)	-
Children > 6 and <59 months with severe acute malnutrition (n=42)	-
Children > 6 and <59 months with moderate acute malnutrition (n=42)	-
Children > 1 year and <59 months with a MUAC under 13.5 cm (n=42)	12.5
Children > 1 year and <59 months with a MUAC under 12 cm (n=42)	6.3
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm (n=57)	28.6
Reproductive age women (15-49 years) with a MUAC < 21.0 cm (n=57)	4.8
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt) (n=40)	0

MORBIDITY INDICATORS:

The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under five years of at 33.3%, is *cause of concern.* The presence of bloody diarrhoea in 5.6% of the children in the village indicates a more serious concern. Many of the cases of diarrhoeal disease might be attributed to hygiene practices and a shortage of water. The percent of children under five suffering from Acute Respiratory Infections is 14.3. Measles vaccination coverage in Afghanistan is 95%, and MOH figures for the Aybak district report coverage to be 85%. Additionally, the measles vaccination coverage of 94.4% in this round of data is consistent with district figure.

CHILDREN NUTRITIONAL STATUS:

Using weight for height percentage of the median, the data shows no Global Acute malnutrition (GAM) for Children between 6 to 59 months. None of the children were found to be severely malnourished (less than 70% weight-for –height percent of the median), or moderately malnourished or suffering from oedema.

Children classified as moderately malnourished by MUAC measurements (less than 12 cm) are potentially at risk of mortality. About 6.3% of the children in the survey were reported to be malnourished (less than 12 cm) and 12.5% were reported to be at risk(less than 13.5 cm) of being malnourished. This figure along with the weight-for- height percent of median suggest that acute malnutrition for children in this age group was not a cause of concern for the village.

ADULT WOMEN NUTRITIONAL STATUS:
Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. In Dara-e-zandan 39% of women have a MUAC below 23.0 cm and 8.7% of women have a MUAC below 21.0 cm.

MICRONUTRIENT DEFICIENCIES:
The presence of iodised salt in the house is a proxy for the use of it and also therefore of iodine deficiency. No households had iodised salt as all salt was locally mined block salt during the survey. However, the iodised salt is available in the local market and there is a factory that produces iodised salt in Ghol mahalah, Shaberghan City, Jowzjan province.

HEALTH FACILITIES:
The table below lists the health services or facilities that are available to the people in Dara-e-Zendan area. However, there are no health facilities in Dara-e-Zendan itself and all the residents of the neighbouring villages travel to Aybak City (Provincial Capital City) to use Aybak City's health services. Aybak City has two main Hospitals and four comprehensive health centres and number of private doctors. People travel there with public transportation, the cost of getting to Aybak city from Dara-e-Zendan is 500 afs. In an urgent situation, people hire taxi, the cost of which (round trip including a waiting period) is 500 Afs.

In Dara-e-Zendan itself, there are number of traditional birth attendants (TBA) to help the village women with birth deliveries. The birth attendant usually comes to the woman's house for services. The common custom of TBA in this village and the surrounding areas is that there are no fixed charges for the TBA services and, as such, every household pays what they are able to afford and in accordance to their class in the community. The TBA fee ranges from 0 to 500 afs and can be in cash or kind. Many households in this village pay to their TBA services using food and no-food items.

All the Government health services in Aybak City are free of charge, and as a result they are used largely by low and middle income families. The wealthy class of Dara-e-Zendan and the surrounding area goes to private doctors which charge 40 Afs for a visit. Many people believe that the services of a private doctor are better than those of the government and if one is able to afford 40 Afs he/she should go to the private doctor. Medicine needs to be paid for in both cases. There are also skilled birth attendants in Aybak City hospitals and additionally there is a private service that people may use in the case of severe emergencies or complications. This type of private service is very expensive. Travel to Aybak is possible in all seasons, including winter, as the village is very close to the city.

Health Facilities Table

	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts	Aybak centre	Less than hour	500	Everybody	Yes
Basic Health Centre	Aybak centre	Less than hour	500	Everybody	Yes
Comprehensive Health Centre	Aybak centre	Less than hour	500	Everybody	Yes
Hospital	Aybak centre	Less than hour	500	Everybody	Yes
Traditional healers/Birth Attendants	Dara-zendan	Less than hour	0	Women	Yes
Skilled birth attendant	Aybak centre	Less than hour	500	Women	Yes
Private doctor	Aybak centre	Less than hour	500	Everybody	Yes

The use of health facilities has stayed steady in the last four months.

WATER SOURCES:

In Dara-e- zenadan, sources of drink water are river and pool. The residence of Dara-e-zandan obtain water for household use from a river and pool (hole where rainwater is collected and stored for use). The primary source of drinking and bathing water is the river, which runs through a steep narrow valley 400 meters below the village. Household Men will spend between half an hour to one hour fetching water from the river - with donkeys if they own them. They will go down to the river twice a week with a donkey, bearing two15 liter tanks to hold the water. Poor households and those households without male members rely on women and sons to get water from the river on a daily basis or from the nearby canals. The local pools, about five minutes walk from the households are managed by the elders. These elders, rotate on a daily basis, and oversee the pool canal pathways every eight to ten days as they receive water from the river through canal every eight to ten

days. Other, villages in the surrounding area depends on similar sources of water for household use, but is even further from the main river. Main priority of the village is to get more access to clean drinking water through Construction of more hand pumps or deep wells with immersed pumps as the Dara-e-Zendan village has access to electricity

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change sinc last year
River	Less than hour	Same	Same
Pool	5 to 10 minutes	Same	Same

SANITATION FACILITIES:

There are three common types of toilets in the Dara-e-Zendan area: open area, vault latrine and deep latrine. The majority of households have a deep latrine toilet in their houses. The vault latrine is usually located in public places like schools and mosques and is always separate for men and women. The very low income households of Dara-e-Zendan who can afford to build a latrine have an open area toilet. Some of these households use the human manure to improve their crop production fields.

CONCLUSION: RISKS TO LIVES

The crude mortality rate is not above both the emergency threshold rate of deaths people per day and the normal developing country level of deaths people per day. Furthermore, for children under 5 years of age, the mortality rate does compare favorably with the stable developing country rate and is less than the emergency threshold rate of deaths people per day.

This survey demonstrated that the children of Dara-e-zandan were not overwhelming public health problem among children less than five years of age. However, Morbidity patterns of children under five years of age were very common problem. Condition of chronic health problems were very common the surrounding area.

In Dari-e-zandan, water and sanitation are completely inadequate. Presumably, the rates of water diarrhea can be attributed to these two factors. This should be improved as rapidly as possible. Adequate preventative and curative health facilities and services should be available and accessible to the village community.

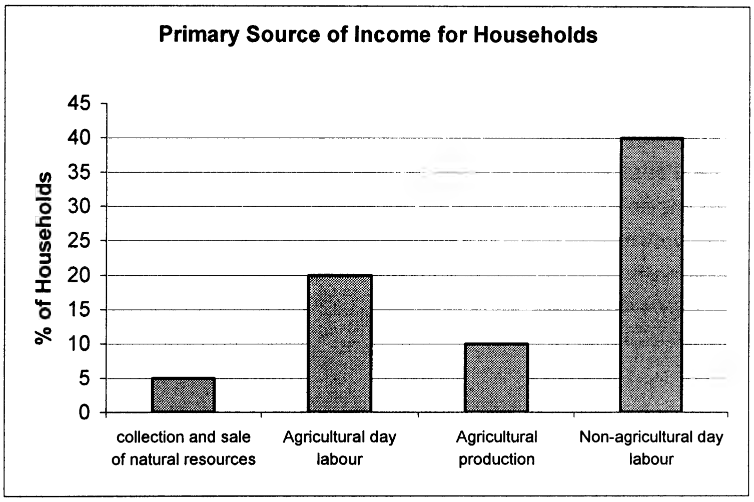
A mass measles vaccination campaign is also needed in this village. Measles vaccination coverage is poor and is probably not interrupting measles virus transmission. Moreover, community training in public health is essential as introducing the community to toilets and other sanitation programmes that will improve the condition of Dara-e-zandan's health problem.

LIVELIHOOD SECURITY – DARA -e-ZANDAN

The Livelihood Security section is structured so that it first gives a general overview of the livelihood strategies of the community and the households within the community. It then looks at the main livelihood strategies of these households, describing the state of the livelihood assets related to each particular income source. This section also seeks to provide indicators of current shocks to livelihood sources and households' abilities to cope with these shocks. This information is also intended to provide agencies with sufficient information to decide whether there is a need to respond to a current shock. It finishes by looking at the characteristics of households that are at high risk of being impacted by future shocks and offering recommendations on how agencies can develop household livelihood opportunities, mitigate against future shocks and protect against livelihood asset depletion.

INCOME SOURCE PROFILE:

The primary income source in Dara-e-zandan during the period of June to September 2003 was non- agricultural day labour, followed by agricultural day labour and crop procuction Dara-e-zandan is approximately ten kilometres from the provincial capital (Aybak), market labour demand and daily rates influence the income of Dara-e-zanda "poor" and "middle" households considerably.



Of all Dara-e-zandan households, 40% stated non-agriculture day labour as their primary income sources. 50% of "poor" households and 25% of "middle" income households also reported it as an income source. Agriculture day labour was the second most important livelihood source for "poor" households. Wealthier households gained some income from crop production.

The table below captures the percentage of households engaged in different activities. This provides an indication of the relative importance of different livelihood strategies to the community. Agriculture day labour is of primary importance as 65% of "poor" and "middle" households depends on this activity. "Poor" households particularly depend on this activity (55%), while "middle" income households form the remaining 10%. No "wealth" households reported an income from agricultural day labour.

Collection and sale of natural resources provided income for 40% of households, while 25% participated in crop production. Other important sources of income practiced on a smaller scale include: taking loan, gifts/gleaning and agricultural livestock.

n=20 Households	Percent of households with Income Source	% of Households with Women's Income Source
Spinning/ Carpets Labour	0	10
Trade / Shops	5	--
Spinning/ Carpets Business	0	--
Agricultural Labour	65	--
Agricultural Livestock	10	--
Take a Loan	30	--
Microbusiness	0	--
Agricultural Crops	25	--
Non-agriculture day labour	60	--
Collection–natural resources	40	--
Formal Wage Labour	5	--
Informal Wage Labour	5	--
Remittances	0	--
Rental Income	5	--
Gifts/Gleaning	5	5
Repayment of Loan	--	--
Begging	--	--

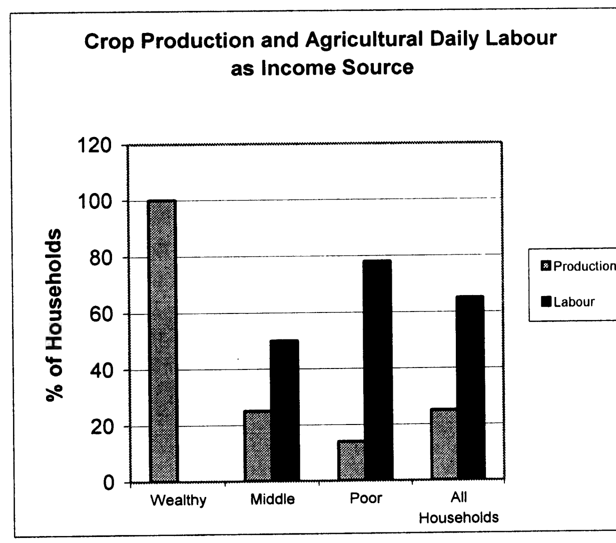
Data regarding women's income activities can clarify the role of women in livelihood strategies and identify potential for future involvement. Only (10%) of women made carpets for a wage.

Carpet labour was the usual female contribution to household income for "poor" and "middle" wealth categories. In "wealth" and "middle" households, carpet weaving accounted for 38% and 29% of income generation activities respectively. No "poor" women participated in this activity.

Trade, natural resource collection and raising livestock were popular income sources for "poor" and "middle" income households. Interestingly, women tended to see activities associated with men as less important. However, all women received money from gifts/gleaning, yet men of all wealth groups did not consider these a source of income.

CROP PRODUCTION AND AGRICULTURAL DAILY LABOUR

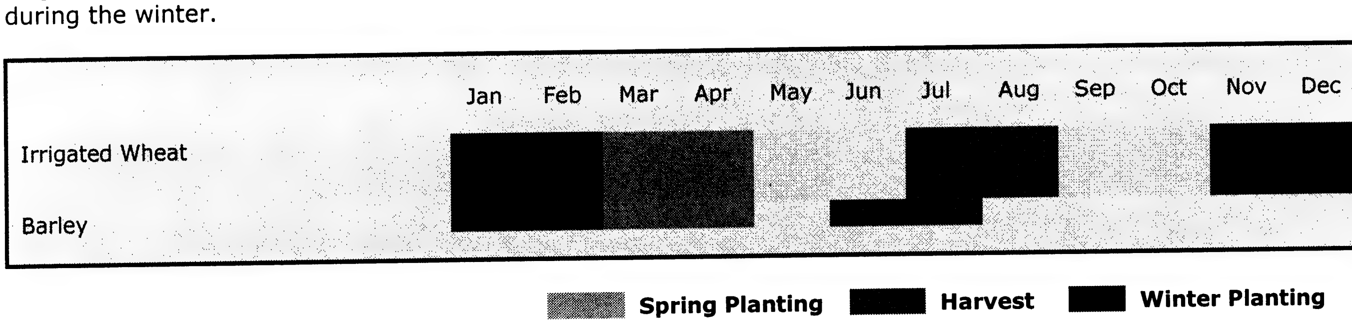
The two major sources of income that impact the poor of Dara-e-zandan are agriculture daily labour and crop production. The graph on the right shows household participation in these two activities across the different wealth rankings.



Wheat, barley, fruit trees and vegetable cultivation on irrigated and rainfed land are the primary crops of these areas. The 78% "poor" households generate income from agricultural labour, while 14% were engaged in crop production. In contrast, 25% "middle" income households listed agricultural labour as an income source, where only 25% households grew crops. "Wealthy" households grew crops and no "wealthy" households were engaged in agricultural labour. In general, "poor" households were oriented toward labour, while the "wealthy" were able to cultivate crops themselves. The range of daily labour rates vary through the year, ranging between 75 and 200 Af's per day. During harvest seasons, labourers may be paid in wheat or barley rather than cash.

Crop Seasonal Calendar

Dara-e-zandan crops are primarily irrigated wheat and barley. As the seasonal calendar below describes, irrigated wheat is harvested in June/July, whilst barley is harvested in June. Both crops are planted once a year, during the winter.



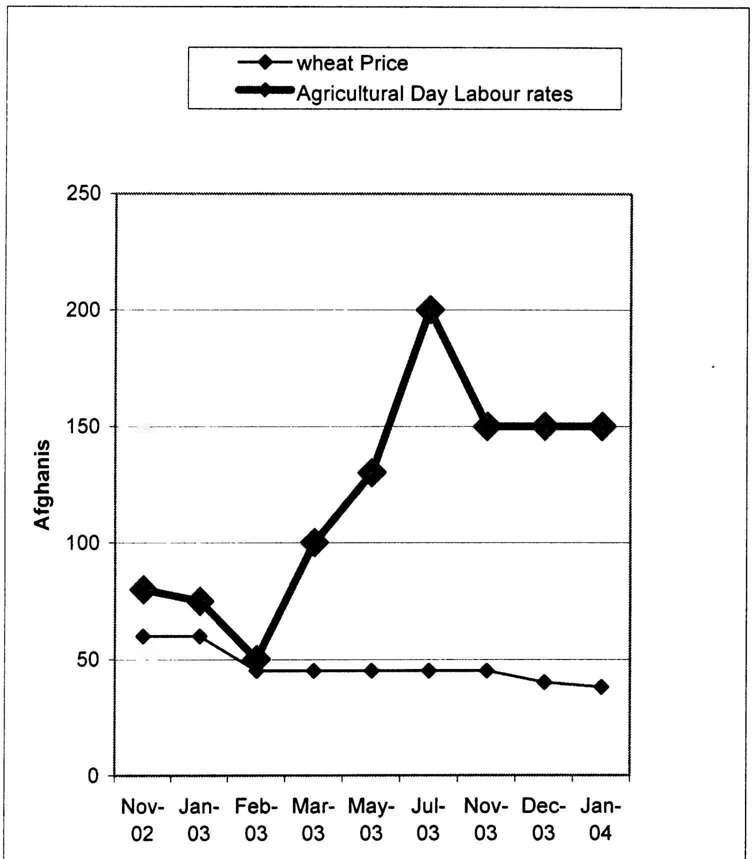
Crop Production Assets: Land Ownership and Draft Oxen

Land ownership is the key prerequisite for agricultural production. In Dara-e-zandan village, 30% of households own land. The average amount and type of land owned differs according to wealth group. Wealthy households on average own 100 jeribs, middle households 25 jiribs and poor household own 14 jiribs of land clearly indicating that land ownership is a key characteristic of wealth differentiation in the community. Furthermore, 20 of wealthy households own irrigated land. Though draft oxen are extremely important to household crop production, in Dara-e-zandan no households owned oxen.

	All Households	Wealthy	Medium	Po
Households owning land (%)	30	100	85.7	15
Average amount of land owned (jeribs)	66	100	25.5	2
owning irrigated land (%)	20	20	0	(
Average amount of irrigated land owned (jeribs)	2	2	0	(

Shocks to Agricultural Yields

In Dara-e-zandan, one household (5%) reported 20-50% crop losses. None reported more than 50% crop losses, however, no other households reported crop loss. Village leaders did report high yields in the four months prior to the survey.



Market Prices of Agricultural Goods

In Aybak city market, wheat prices remained constant from February 2003 to January 2004. The present (January 2004) price of 38 Af's per seer (7 kg) is marginally lower than January prices.

The graph on the left compares day labour rates through the year. The highest rates coincide with harvest seasons (June to November) while planting occurs from November to January.

During the 2003 planting season, the usual daily labour wage was 75 Af's, though planting labour rates have since doubled.

Daily labour rates reached a high of 200 Af's per day during July and November 2003. This corresponds to the winter harvest and spring planting seasons. Should wheat prices remain depressed while agriculture labour rates are inflated, input costs will rise so that farmers are forced to stop growing wheat.

LIVESTOCK

Ten percent of households claim income from livestock raising. Of these households one households was from wealthy group and one, was from poor households. Livestock raising was not generally an important source of income in Dara-e-zandan. Previous Goal Survey (March, 2002) described a 60% reduction in Afghani livestock populations due to drought nationwide. In Samangan, approximately 80% of animal stocks have been lost. Calving/ lambing rates range from 30 to 80% resulting in a slow increase in animal numbers, though current populations remain much lower than pre-drought figures. Longer-term breeding programmes and increased access to credit so that farmers can increase reproductive capacity and purchase new animals will be needed to replenish livestock populations.

	Goats	Cows	Donkeys
Average Number Owned "Wealthy"	0	0	1.5
Average Number Owned "Middle"	0	1.0	1.5
Average Number Owned "Poor"	8	1.0	1.1

Almost all households owned donkeys, which are extremely important to households in this region as they are used for obtaining water and for traveling to the market.

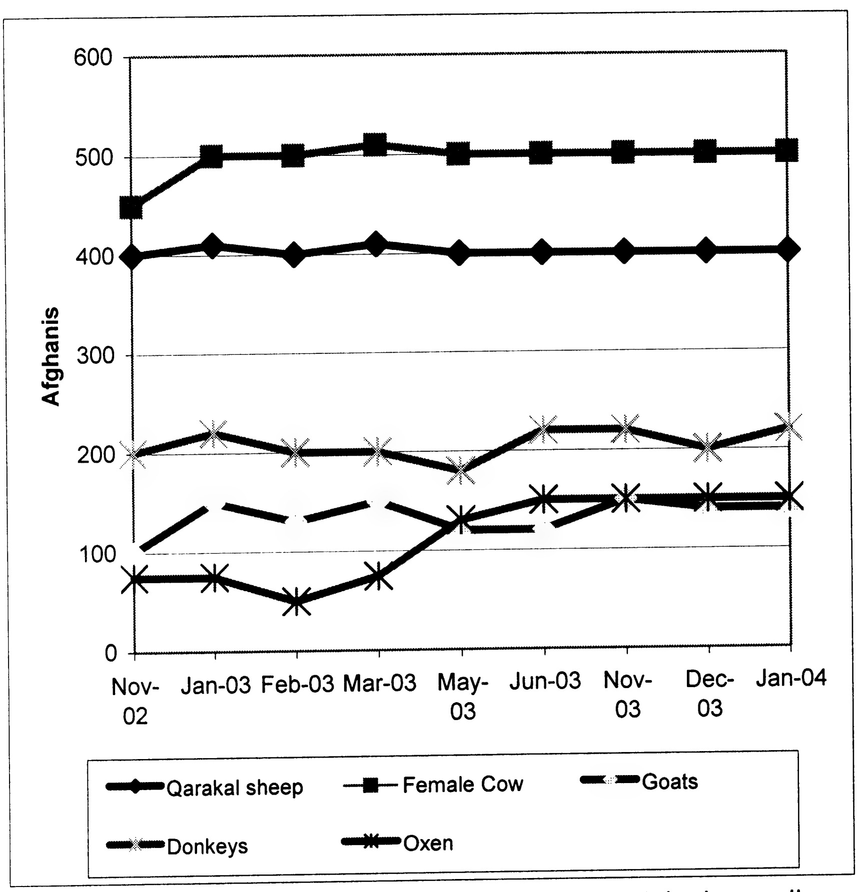
34

Livestock disease

When asked about livestock diseases, village leaders noted that sheep and goats were affected by sheep Pox and cattle sometimes suffered from foot and mouth disease. Only 8 heads of cattle were owned in Dara-e-zandan, and 75% were said to be infected with foot and mouth. However, no cattle were observed with the disease and no households offered evidence that any animals had died. Foot and mouth cannot be ruled out in Aybak district since this has been a problem in the past, but more evidence is required to support the claim that this disease is still a problem.

There are 20 heads of sheep and goats in Dara-e-zandan, with 5 suffering from sheep and goat pox (SGP). Symptoms include skin lesions through all skin layers, persistent fever and lymphadenitis. The disease can be acute or chronic, evolving to generalized lesions through skin and mucous membranes and focal (viral) pneumonia characterized by lesions uniformly distributed through the lungs. One of the largest viruses, Capripox (170-260 nm by 300-450 nm) is responsible for the condition and is closely related to viral lumpy skin disease. Severity is dependent on the age and breed of the animal, and the virulence of the strain (Jubby et al., pp. 466-469).

No vaccination clinics have occurred in the last four months, though a veterinary clinic and hospital exist in Aybak centre . Medicines are not available provincially to treat the condition, and vaccination is the most effective way to prevent animal losses. Of available vaccinations, the most effective seem to be the Romanian and Kenyan O 180 strains that offer best safety and efficacy (Jubby et al., pp. 466-469). Killed vaccinations have little practical effectiveness since field research suggests that they do not provide lasting immunity from SGP.



Livestock Prices

Dara-e-zandan and surrounding villages rely on the Aybak city markets livestock sales and purchase.

As seen on the left, both qaraqal sheep and cow prices remained stable from November 2002 until January 2004. However, oxen prices increased between February and January 2004. Goat prices were stable at approximately $150, with seasonal variation.

Donkeys are considered the second most important animal to own, and prices tended to remain stable around $220, though some seasonal variation existed.

Grazing land and Access to Water

According to village leaders, access to grazing land has increased in the four months prior to the survey. Grassland productivity has been similar to previous years, whilst access to water increased. However, water shortages between 1999 and 2002 did play a role in subsequent animal losses. Unfortunately, local authorities were not able to use changes in grassland and water access to predict future threats to livestock. Increased awareness of threats to grazing land access might have allowed communities to protect themselves better against drought related animal losses. In addition, common grazing land is sometimes compromised by illegal plantations of rainfed wheat. This practice can also compromises community animal stocks.

EMBROIDERY, CARPETS, GILIMS, WOOL and SILK SPINNING:
Handicraft sales were a small proportion of income generation activities. Only 10% of households reported as an income. "Middle" income households (5%) and one household of the "poor" (5%) made handicrafts for cash, however, no system exists to exchange handicraft labour for wages. No "wealthy" households participated in this activity. The average income from the handicraft for "wealthy" households was 1000 Af's, compared to 967 Af's for "poor" households.

COLLECTION AND SALE OF NATURAL RESOURCES
Eight households collected and sold natural resources. Of these households, six were "poor" and two were from the "middle" households. All eight households collected and sold bushes and animal manure. Both livelihood activities were negatively impacted by recent drought. Lack of rain meant that bushes did not grow as well, and fewer animals led to a reduced amount of dung available for collection. The future availability of these resources did not appear to be compromised since animal stocks would be replenished, and bushes are cut above the root system so that will grow again after the rains. Despite the drought, bush prices have remained stable, but fewer households collect this resource as market rates for day labour are more profitable for households.

LABOUR AND OWN BUSINESS
Shops/Trader
One households (5%) own shops in Dara-e-zandan as primary livelihood source. Shop ownership is used as a criterion for household wealth rankings, since only households with sufficient assets to own or rent a shop close to the village centre. The shop is simple groceries that stock household consumables like food, soap etc.

There was no identifiable trend for increased or decreased profits of the shop. However, shopkeeper and trader profits are generally vulnerable to changes in market prices. Cross-border exchange rates, transportation and security constraints contribute to market rates. Unfortunately, no recent information is available to compare current market prices with previous years.

Informal Wage Labour (shepherd, driver)
One poor household claimed to receive informal wage labour as an income source. The poor household reported decrease income for the last months

Formal Wage Labour (government/health/education/admin)
One middle households have formal wage labour as an income source. The only household which have a formal wage as an income reported an income decrease.

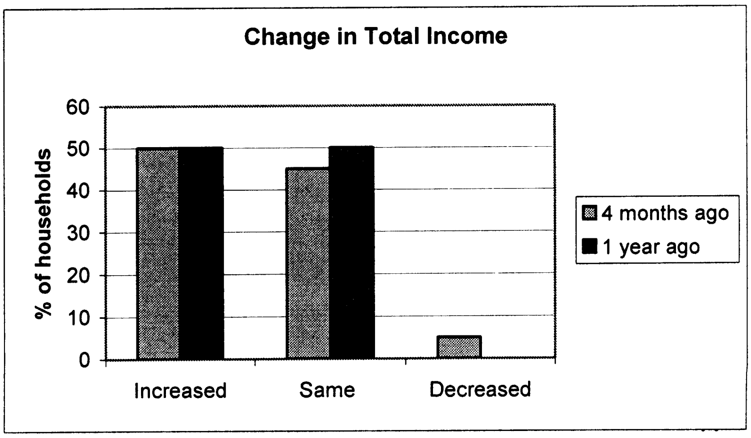
OTHER INCOME SOURCES
None of Dara-e-zandan household reported income from remittance, loan repayment, begging or mortgage as income.

Rental income (land, house, shops, agriculture equipment)
One household from poor group collected rent as income and the household reported income increases.

Loans
Loans were a major source of income for 30% of households. Of these households, four were "poor", and two from the "middle" ranking. Four of the "poor" with one "middle" income household reported income increases, while the remaining one households ("middle") reported no changes.

Gifts/Gleaning
One "poor" household reported income from gifts/gleaning and the income stayed the same.

GENERAL LIVELIHOOD SHOCKS or CONSTRAINTS:
As seen on the right, 45% half of all households reported stable income over recent month, while 50% of households reported and income increase and a smaller proportion of houses experienced a drop in income (5%). This does not contrasts with last year's trend where most households (50%) reported increased income. This stability in income rates suggests some security. However, decreased income rates were not associated with common activities, thus these trends might be attributed to normal variation rather than a specific shock.



The household coping strategies included here were not meant to include all possible options a home might exercise to survive tough times. The activities chosen were meant to reflect easily measured behaviours that might predict declining livelihood and food security in Afghanistan. The chosen behaviours were sub-divided into erosive and non-erosive coping strategies to better understand the effect of household coping behaviours on future livelihood security. The division of behaviours cannot be considered mutually exclusive as some non-erosive behaviours (selling motorcycle, bicycle etc.) might affect future opportunities. Similarly, the list does not reflect a continuum of behaviour, but general indicators of a worsening situation. However, some households experiencing chronic or transitory poverty may also periodically use these strategies.

Non-Erosive Coping Strategies (last four months) (n=40)	Percentage
Households who borrowed food from relatives to make a meal	30
Consumption of dried bread	5
Erosive Coping Strategies (n=40)	
Household took out loan	30
Households who took food on credit from local shop	60

Non-erosive coping strategies

None of the results from coping behavior indicators signaled a sign of concern for the Dara-e-zandan area. The four months prior to the survey there was no sign of distress asset selling of non-productive assets. Food sources and consumption patters are also key indicators of vulnerability. Of the families interviewed, 5% consumed dried bread, a clear indication of food insecurity. Other than food consumption changes, most families needed external support to find sufficient food. Less than half of households (30%) were forced to borrow food from relatives to make a meal in the last four months. In the same way, up to 60% of households took food on credit from local shop or bakery.

Erosive and distress coping strategies

Household coping strategies varied by individuals, households and villages. In Dara-e-zandan, the most commonly used strategy was requesting food credit from local shops (60%), whilst 30% needed loans to cope with daily expenses. Most households with loans were "poor" (20%), while the remaining (10%) were from "middle" income households. No other strategies or less commonly were used. These strategies indicate a high vulnerability to future poverty in "poor" households as these behaviors jeopardize future production capacity.

Migration

In Aybak district, the total returnee from October 2002 till October 2003, according to the OCM/PIK-EC were between 3313 to 2197. Furthermore, the UNHCR data collection of November, 2002 to November 2003 returned Internal Displaced People (IDP) was 207 people. In comparison, our data shows no returnee was reported in Dara-e-zandan for the last 4 months.

Transport

In Dara-e-zandan village there was no transportation problem. People walk to the city daily with animal and hire all the public and privet taxis. People in Dara-e-zandan have access of transport in the morning and at the evening only. It seems People can afford the present public transport fee round trip of 20 afs and it cost 300 afs a round trip taxi fee.

Income Diversity and Capacity to Cope – Risk to Livelihoods

Households with varied income sources tend to be better able to absorb shocks and cope with stresses induced by climate, price instability, unemployment and complex emergencies such as political crises. Households relying on only one or two income generating activities tend to be particularly vulnerable to stress. Therefore, the number of income sources available gives a broad indication of household capacity to cope with these stresses. In Dara-e-zandan, households have a mean income diversity score of 2.7. In many cases the wealthier household often score higher an income diversity measures, however, in this situation all wealth groupings have a similar score. Primary income sources for Dara-e-zandan included non-agricultural day labour, crop production, agricultural day labour, collection and sale of natural resources.

	Average Income Diversity Score
Wealth	2.5
Middle	2.8
Poor	2.7
All households	2.7

53

CONCLUSION - LIVELIHOOD SECURITY SUPPORT

Sustainable livelihoods in the community require each member's participation and the adoption of methods that enable people to make their own decisions about issues affecting their families and immediate surroundings. Rebuilding village livelihoods is an enormous task that requires interventions in every sector of society. Thus, choosing interventions that best support livelihood security is of primary importance. The data presented explores some of the main coping strategies households use to survive livelihood shocks. Examining the most popular coping strategies with household wealth rankings gives some insight into indicators of household vulnerability and opportunities for livelihood interventions.

The survey shows that the livelihood strategies adapted by the households varied with individuals and households across the three wealth groups studied in Dara-e-zandan households. It is also noted that there was no one alternative coping strategy for a particular problem, but series of options. These options were not homogenous either across wealth groups. None of the results from coping behaviour indicators signalled a sign of concern for the Dara-e-zandan wealthy and middle households. The four months prior to the survey there was no sign of distress asset selling of non-productive assets. However, most (especially poor households) of the families had to look for external support to cover their food needs. 30% of the families had to borrow food from their relatives in order to make a meal in the last four months and 60% of the households took food on credit from the local shops. Furthermore, 5% of the families interviewed had been eating dried bread or poverty food, which clearly highlights a situation of food insecurity.

36

Samangan Surveillance Unit

National Surveillance System (NSS)

Transitional Islamic State of Afghanistan

Ministry of Rural Rehabilitation & Development, Ministry of Agriculture & Animal Husbandry & Ministry of Health

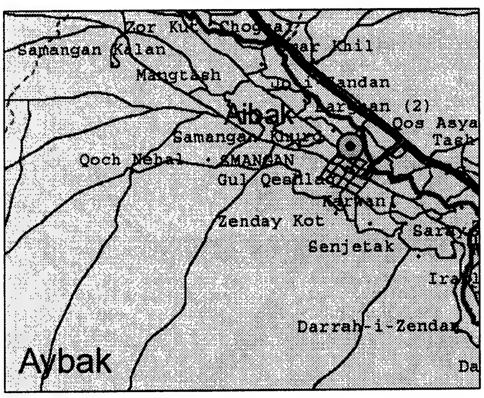
Aybak District
- Sharik yar Sentinel site

Fall 2003

SUMMARY FINDINGS FOR SHARIK YAR SENTINEL SITE IN NORTH EAST OF AYBAK DISTRICT

(These findings are based on field survey of 20 households and Sharik yar village leaders' interview. These findings should not be assumed to be representative of other parts of Afghanistan).

SAMANGAN PROVINCE



Contents of Bulletin	Page
Summary of findings	1
Objective of Report	2
Aybak District livelihood Zones	2
Sharik yar General information	4
Sharik yar Food Security	5-8
Sharik yar Risk to Lives	9-11
Sharik yar livelihood Security	12-18
NSS Methodology: After final sentinel site	

The report is organized so that for each sentinel site in Kohistan, key indicators representing the main components of each of these three categories are presented and discussed in a narrative format.

Food Security

- None of the households consider the food situation worse than four months ago or one year ago. Furthermore, 55% of households felt they were not able to buy/cultivate enough food the past four months. Five percent of the interviewed household thought the food security would worsen over the next four months, though many expressed uncertainty about how they could predict changes in food security in their home. However, household enumerators thought that 35% of poor households di not have enough food to last through the winter.
- Dietary Diversity is a concern of "poor" income households in th village. However, these concerns are based on the frequency of consumption reported by households.

Risk to Lives

- The crude mortality rate is not above the emergency threshold rate (1 deaths/10000 people per day) and the normal developin country level (0.5 deaths /10000 people per day). Furthermore, for children under five years of age, the mortality rate (0.5 deaths/10000 people per day) does compare favourably with th stable developing country rate (1.0 deaths/10000 people per da and is less than the emergency threshold rate (2 deaths/10000 people per day).
- Morbidity patterns of children under five years of age were less common problem (ARI: 14%, watery diarrhoea 9.5% and bloody diarrhoea 5%)

Livelihood Security

- None of the households have reported a drop in income, while (10%) of all households reported stable income over recent month, and 85% of households reported an income increase Th does not contrast with last year's trend where most of househol (90%) reported increased income. Households (20%) were forc to borrow food from relatives to make a meal in the last four months, while households (35%) required credit from local shop in order to obtain sufficient food. 5% of the families interviewec had been eating dried bread, which clearly highlights a situation of food insecurity.

What is the NSS?
The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs.

Methodology
The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the communities with respect to agro-ecological features, economic activities, available services and people in a given area (livelihood / agro-ecological zone). Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel may not be representative of every village in the zone. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same zone (See Annex I for detailed information on methodology).

OBJECTIVES OF REPORT

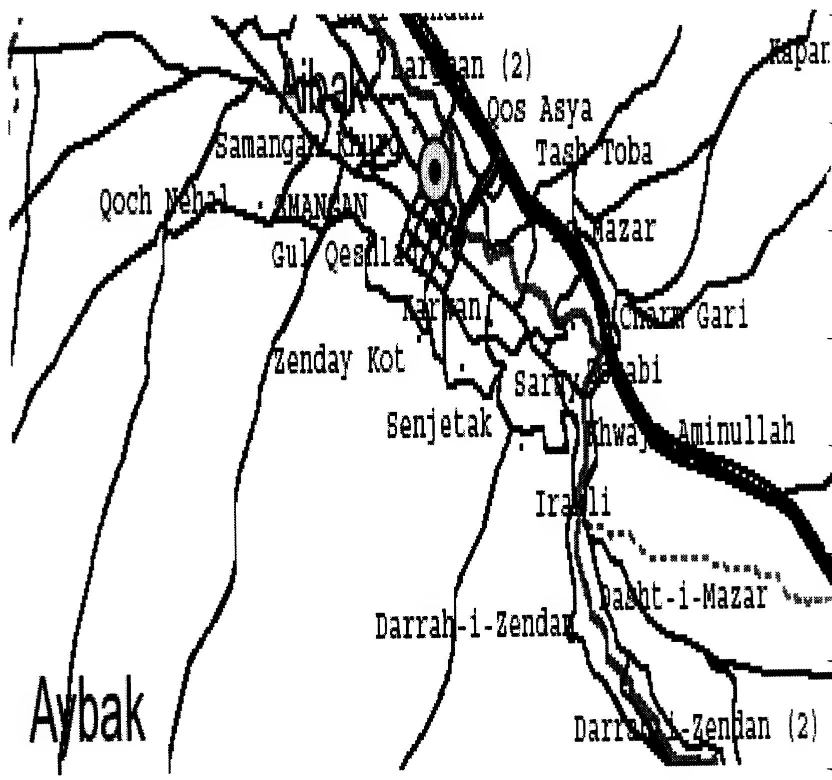
- Provide current information on household food security status in Aybak District
- Provide information on risk to lives and nutritional risk of individuals in Aybak District
- Provide information on the current household livelihood security situation in Aybak District, specifically looking at current shocks to livelihoods and the ability of households to adapt to (cope with) these shocks
- Develop a better understanding of the vulnerability and risk of communities and households in Aybak in relation to issues of food security, mortality, health and nutrition.

Additionally, this report provides baseline information on indicators that are unique to a local area and have not yet been explored in the depth needed for use in guiding programmes and policies. They are:

- Characteristics of household wealth in Aybak District
- Livelihood Strategies employed in Aybak District
- Presence of morbidity, mortality and malnutrition in rural communities in Aybak District

And finally, the report aims to provide information on how government and other agencies can use this increased understanding of livelihoods, vulnerability and risk in order to design and prioritise effective policies and programme interventions.

LIVELIHOOD ZONES FOR AYBAK DISTRICT



Livelihood zones in Aybak District can be divided into three distinct agro-ecological areas. These distinctions impact household livelihood patterns, and one sentinel site was selected from each area. Most of the province consists of mountainous, rainfed farmland and irrigated valleys. However, this report will focus only two agro-ecological zones and report includes information on the sentinel site from zone one and two.

Zone one: Irrigated land: (21 villages): Dara-e-zandan: This zone covers South East of Aybak city. These communities share similar livelihoods and are located in river/canal-irrigated valleys. Access to water generally includes canal water from Samangan river that is used for both irrigation and household consumption. Wheat and barley are the main crops. Horticulture crops and fruit trees are also common crops growing in this sentinel site.

Zone two: Mountainous and flat rainfed vally land (65 villages): Sharik yar: Zone two covers 65 villages Northeastern part of Aybak city. The communities share similar livelihood and are located higher mountainous land and downstream valleys. The source of water is rainfed, the main crops are wheat and barley.

Samangan Province is in Northern Afghanistan. It shares a border with Kunduz to the North and is bordered by Baghlan to the East and Bamyan to the South and Balkh and Sari Pul Provinces to the West [*Appendix 1: Map showing rural poverty by province*]. Samangan consists of five districts: Aybak, Khuram Sarbagh, Roy-I-Duab, Dar-I-Suf and Hazrat-I-Sultan. Aybak city is located in Aybak District and is the provincial capital. It is on the Mazar-Kabul highway and is 120km SE of Mazar. It is situated in a wide valley between the mountains of Chagat to the North, Kohi Bas to the South and Dal Khaki to the West.

Demography
The population of Samangan is approximately 318,500 and is of mixed ethnicity. The Tajik and Uzbek population make up 60%, Pashtun 20%, Hazara 15% and Turkmen 5%. The population of the main city of Aybak is 21,786, the Aybak district population is 87,670.

Socio-economic Information
The main source of income for the area is from agriculture, clerical work, teaching and retail. For women, income is gained through skilled work such as tailoring, embroidery or weaving, or through domestic activities such as washing clothes, cleaning and vegetable production. There is a high incidence of poverty and many families lack basic necessities such as adequate shelter, food and water.

Administrative System and Political Affiliations
The civil war in Afghanistan can be described as a complex political situation. The ethnicised conflict is embedded in, and is characterized by loyalty to one particular ethnic group military leader and strong antipathy towards other ethnic group leader. Administrative, political and military power holders often play a fundamental role in determining access to resources. The overriding issue of the conflict in Northern Afghanistan is the power struggle between Jamiaat military party and the Jumbesh military political group. After the fall of Taliban most of Samangan province has been a loyal to Jumbesh military power and the Samangan governor who is Samangan Jumbesh party representative. However, there is a presence of Jamiaat military group control in some area of the province. Sometime, the area are characterized by a high attention of fighting, violence for the presence of both armed forces.

Aybak District
Located in the center of Samangan province, Aybak has irrigated land area of 7553 hectors (ha) and 41471 ha of rainfed land area with population of 87,670. Specific vulnerabilities have evolved due to decades of conflict and political instability. Communities here are characterized by weakened or non-existent institutions, high susceptibility to violence, forced displacement of people, denial of basic human rights to some groups within the community and high livelihood vulnerability. Drought has compounded the challenges faced by communities and Aybak residents have recently lost livelihood resources (stocks and assets) and basic livelihood strategies (agriculture, wage labour, trade and outcome living) have been drastically undermined.
Food security remains uncertain in most rural communities, as does livelihood security and personal security of individuals. Study of these trends will allow insight into the natural resilience of community livelihoods.

GENERAL SHARIK YAR INFORMATION

Sharik yar is the sentential site chosen to represent the sixty five villages of the surrounding North east site of Aybak city and is located at an altitude of 1200 meters. Sharik yar is UZBEK word and means friendly sharing. The majority of this settlement and surrounding area is Uzbek and the dominant (99%) language is Uzbek.

	Average Household Size
Wealth	**7.1**
Middle	**5.3**
Poor	**5.4**
All Households	**6.2**

This village has 350 households in the settlement. The 350 households have 6 mosques and number of households together own one mosque. Of these 350 households, 57% are male and 43% women. Household size in Sharik yar differs with wealth, with an average household of 6.2 members per household. The community defined a household as a group of individuals who live in the same house and share consumption and expenditure. Household size in Sharik yar for both "poor" and middle" are five members per family, whereas, wealth family household size is seven family members. The common reason is that wealthy man can afford to married more than one woman and all his wives will live together as a household.

The Qaruadar (village leader) Mullah Abdull Manan Saheb of mullah Tash Mosque (the biggest mosque of the village which has 53 household), has been chosen by the people of this village as a village leader. The leader of the village with the *shura*(elders) group make all the decisions and make facilities for the community. Usually, all disputes within the village are settled by a group of village elders. They have administrative links to the Aybak district, which is 2 hours away by vehicle. The district governor is responsible for his district to the provincial centre, at this point, Aybak. Households pay annual land tax to the governor which is one kilogram (1kg) of wheat every year.

In Sharik yar village has one tent primary School (1 to 6th grade) for the boys of the village. The school is within a short distance and the students are able to walk. School has four classes and each class has between 50 to 60 students. The total number of Students is 157 Students. The teachers of in this school are males and most of them are from the Aybak city.

Most of households have a high number of dependents, particularly children and economically active unemployed immediate relatives. However, the average household size and dependency ratio is higher in Sharik yar than rest of the district.

Further more, social networks are essential for livelihood strategies. Women play a major role in reproductive and household's affairs. Children often help women with accomplishing some of their responsibilities. Men have more authority than women. Some men are engaged in waged employment. It is the men who have control over the large agricultural activities and who are involved in local community politics at ethnic or tribal authority level.

Assets and Activities	Wealth Group		
	Wealthy (45%)	**Middle (20%)**	**Poor (35%)**
Male Group perception			
Land	50-60 Jeribs	10-15 Jeribs	0-5 Jeribs
Sheep/goats	20-50	5	None – 1
House	1-2 rooms	1 room	1 room
Donkey	1-2	1	0-1 (own or borrow)
Water	Collect with donkey	Collect with donkey	Collect with donkey
Carpet	1-2	1-2	0-1
Gillim	2	1	1-2
Travel	Mazar or Aybak Market	None	None
Employment	People work for them	Does own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to the poor households	None	Receives Zaqat
Female Group perception			
Land	50-60 Jeribs	15-30 Jeribs	0-10 Jeribs
Sheep/goats	40-60	15-25	None
House	3 rooms	1 room	1 room
Donkey	3	1	0
Carpet	4-5	1	0
Iranian carpet	1	0	0
Gilim	4-5	2	1
Travel	Aybak	None	None
Employment	People work for her	Does her own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to Mullah	None	Receives Zaqat
Clothes	Has several dresses	Has some dresses	Has less dress
Jewelery	Has many coins, a watch and bracelets	Has some coins (not silver)	Has none or two

Gender was found to be critical in the household structure and processes that relate to rural livelihood security. The data shows unequal gender relations at household level. To a large extent, household headship determines the access of the household to assets and resources, division of labour, decision-making, power and livelihood strategies. Female-headed households tend to diversify their activities to earn income in cash and in kind. Gender was identified as an important factor in using indigenous knowledge in enhancing livelihood security. Both men and women were found to possess indigenous knowledge. Women's indigenous knowledge is essential for ensuring household food security, maternal health and child care and income generation through weaving fiber clothes, production of carpets, and handicraft. Their knowledge is not limited in food production and post harvest processes. men utilize their indigenous knowledge in agricultural production, carving and traditional medicines .

The local peoples' knowledge was not taken into consideration in planning and implementation of the rehabilitation development programmes in Northern Afghanistan. More attention should be given to indigenous knowledge in order to promote economic growth, social development and eradication of vulnerability and poverty in Afghanistan.

The community categorized households into three different wealth groups, or socio-economic categories. The table on the right describes the type of features characterizing each wealth group and the percent of households falling in each category.

Wealthy Households: 45 percent (9 households)

A household who have access to land and livestock.
--women--

A household who have rainfed land and having more than 40 sheep, goat, camel, donkey and cow.
--men--

Middle Households: 20 percent (4 households)

Limited land, livestock *(14-20), a self employed household, who do not seek help from others.*
--women--

A households who have more than 10 to 20 Jeribs of land and have limited livestock, home and donkey
--men--

Poor Households: 35 percent (7 households)

A poor Household is some one who work for the others and do not have an access to land and does not have donkey.
--women--

Daily labour who works for others, have no access to land and have no livestock.
---men----

These socio-economic groups will be used throughout the report to understand how food security, livelihood security and risk to lives may be different for households of different socio-economic status. There is a large difference in the household size between the wealthy and the other two groups that the enumerators attribute to a few different reasons.

It is seen that the rich men have more than one wife at a time and so bear children from both wives and that the sons of rich families do not separate from the family after marriage. In addition, members of poorer families may migrate to find work and so contribute to a smaller family.

Sharik yar is situated in a remote rural area where the general service provision for basic needs such as clean water supplies, sanitation, education, health, communication is very poor. There are also fewer opportunity to diversify income sources. Consequently, households depend very much on the natural resources base for food, health remedies and materials for making crafts for income-generation without much attention to sustainability issues.

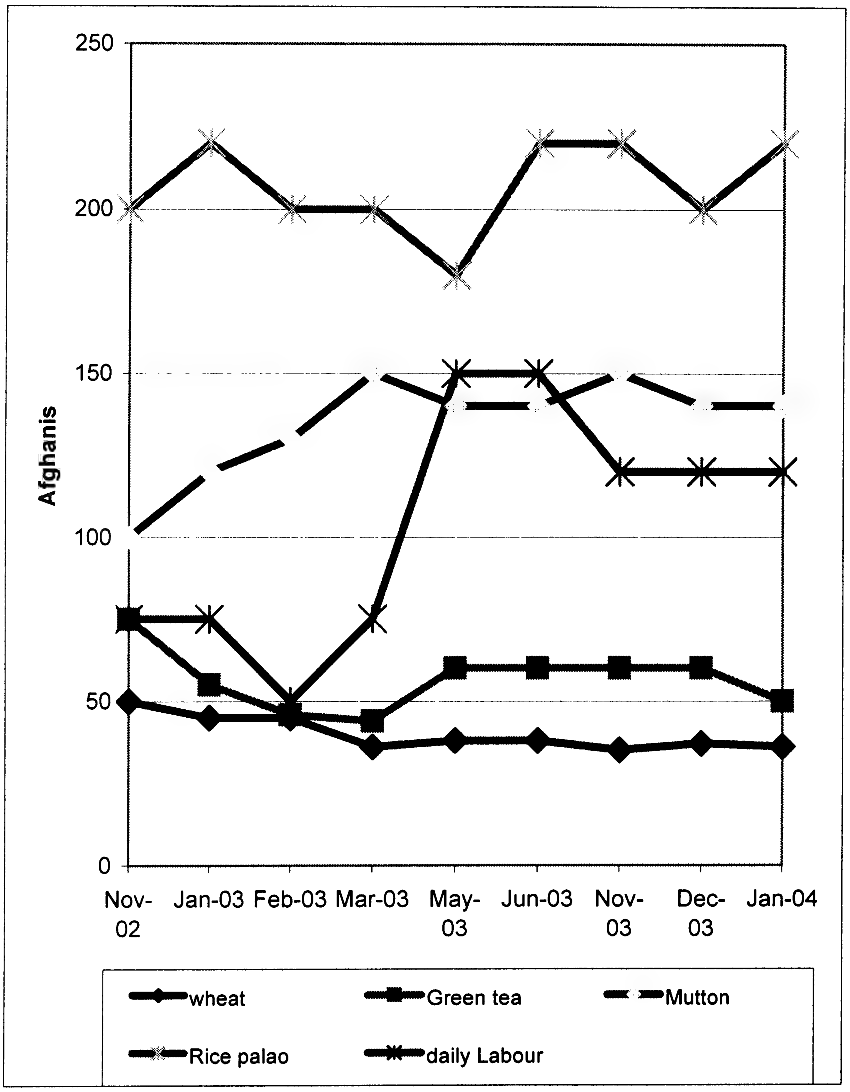
There has been some identification of important determinants of vulnerability to food crisis faced by village poor households and enumerate their coping mechanisms. Households suffer because of inadequate agricultural production. The village location is characterised by combination of difficult situations that contribute to their vulnerability and poverty. Some of the common problems are hilly topography, poor soils, low and erratic rainfall, poor infrastructure. Vulnerability and poverty among the households is endemic in Sharik yar.

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MARKET ACCESS

Aybak city is the closest food market to Sharik yar, accessible by foot or Vehicle (two hours by foot or donkey).The road buil by GOAL is in relatively good condition. According to this survey, some travel by vehicle (150 Af's per trip) but this cost may vary according to the person's location in the village. Most Sharik yar residents access Aybak market to trade wheat and livestock, and also purchase food and non-food items. The largest trade by women is carpet sales. Market transactions are cash based and most households send one person to the market on market days (Mondays and Thursdays, weekly). The market is open year-round and is one of he most important trading for local districts, Samangan and the surrounding provinces.

Location of Market	Time taken to reach market		Cost of getting to market	Market Accessible in winter
	Vehicle	Foot		
Aybak City Market	2 hours	3 hours	150 Afs	Yes



MARKET PRICES

Sharik yar households rely on Aybak market for food and non-food items, 50% of households purchase wheat. Wheat prices have been stable over the past year and impact daily labour rates since many workers are paid wheat for work. When prices decrease, whilst labour rates increase, it becomes more profitable to work for wheat compared to growing own crop.

As shown on the graph to the left, wheat and grean tea prices have been stable this year. However, daily labour rates increased from March 2003 reaching a peak of 200 Af's per day in June. Rates then began decreasing in November. The same trends held for both rice and mutton. Rice reached a peak of 220 Af's per Kg from January, June and November 2003 and January 2004. Mutton prices reached a maximum price of 150 Af's in January, March and November 2003.

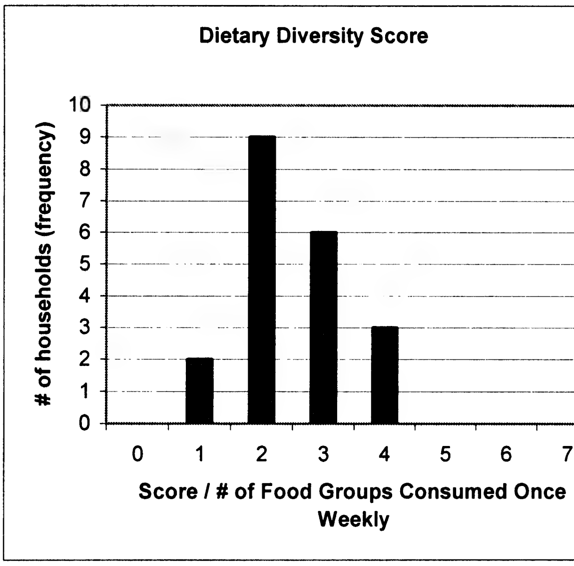
Mutton and rice increases directly impact village food security since these are staple food items. Households also purchase vegetable items (potatoes, spring onions, okra and carrots) from Aybak market: prices have remained steady. There are seasonal shortages of some vegetables, though this does not seem to impact vegetable prices nor is demand increased during off-season. Households simply purchase what is available at that time in the market.

DIETARY DIVERSITY - DIET QUALITY

Dietary diversity is a major component of food security. Previous studies show that Afghani dietary habits are not normally diverse and consequently, there is an increased risk of micronutrient deficiency disorders and related diseases. It is not entirely clear how dietary preferences and food availability interact to determine household diet patterns. To better understand diet quality over the past four months, surveyors asked householders how frequently they ate foods from different food groups. These results were summarized in a

HV

dietary diversity score to capture dietary quality and household diet patterns. Household dietary diversity scores are summarized in the graph on the right.



The diversity score is calculated by attributing **a score of "1" to each food group that was eaten at least once weekly** by the household. Households with a higher diversity score have a more diverse diet. Surveys repeated throughout the country indicate that most households consume cereals or grains on a daily basis and thus, cereals were not included in the diet diversity score. On average all households combined in Sharik yar had a dietary diversity, score of 2.5 With nine of 40 households scoring "2", Six households scoring "3".

Diversity scores improved with increased wealth with a relative scores of 3.2, 2.5 and 2.1 for "wealthy", "middle" and "poor" households respectively. These results suggest that "wealthy" households either have the means to buy more expensive foods or, have acquired a preference for a more diverse diet. However, it is uncertain if the varieties of food available are seasonal, imported during the off-season or, produced locally.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households. The data shows that all households are eating protein rich foods (meat, milk, eggs, and pulses) at least once a month to once a week to complement cereals (wheat and barley). However this data does not allow inferences regarding protein sufficiency.

Household protein choices differ according to wealth. "Wealthy" households eat meat weekly, whereas "poor" and "medium" households eat meat only once month and two to-three times a month respectively. All households drink milk two to three times a month. "Medium" households have eggs once a week where "wealthy" and "poor" eat eggs twice week. Adequacy of protein intake cannot be inferred from this data, although a decrease in the frequency of protein food choices per month in households might indicate a decline in food security and increased poverty.

In the last four months, no household reported or seems to be eating green vegetables compare to other vegetables of okra, tomato, egg plant, potatoes and radish. "Wealthy" and "poor" household eat these vegetables at least twice a week, where middle household eat almost once a week. In comparison, "wealthy" household eat fruits two to three times a month where "middle" and "poor" did not eat fruits for the last for months.

As data regarding quantities and consumption practices were not collected, no inferences can be made regarding the adequacy of vitamin and mineral intakes. Nonetheless, this data suggests some areas needing additional research include:

1. Vitamin A sufficiency (animal sources and beta-carotene from plant sources);
2. Calcium sufficiency (milk and water, most water is hard, sources), and;
3. Vitamin C sufficiency (fresh plant sources).

These concerns are based on the frequency of consumption reported by households and the limited availability of these foods compared to other items.

Average Frequency of Food Group Consumption by Wealth Group

Wealth Group	Meat	Milk, Yogurt, Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other Vegetables	Fruits
Wealth	4.9	1.7	4.6	1.6	1.0	5.6	3.0
Middle	2.5	2.0	4.3	2.3	1.0	3.5	1.8
Poor	1.6	1.3	4.9	1.6	1.0	5.1	1.1
All Households	3.3	1.6	4.6	1.7	1.0	5.0	2.1

1 = Never Eat
2 = Once a month or less
3 = 2 to 3 times a month
4 = Once Weekly
5 = Twice Weekly
6 = 3 to 5 times Weekly
7 = Always

CROP PRODUCTION

43

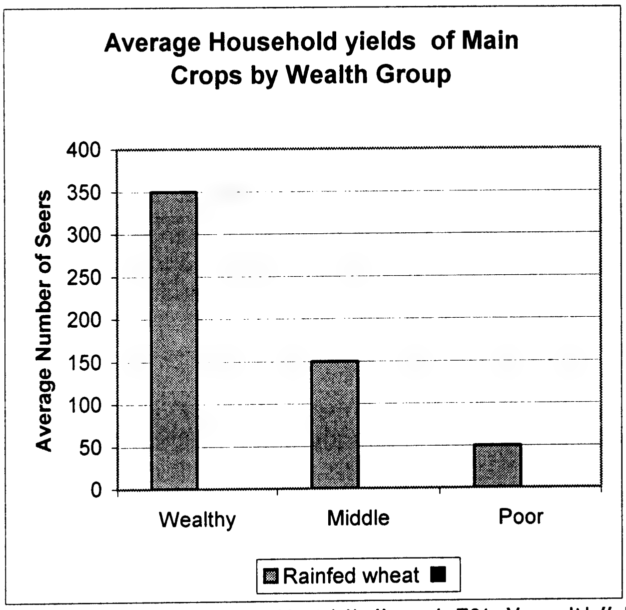
Rural and semi-rural areas in Afghanistan remain highly dependant on subsistence agriculture for households consumption, monitoring annual crop yields versus amount planted can help predict the food security of households. Irrigated Wheat and Barley are the staple crop growing in this areas. In Afghanistan, Irrigated land provides 93% of total production, whilst rainfed produces the remaining 7% (FAO report). In Sharik yar, agricultural production is the most important source of income with 45% of households engaging crop producing.

2003 Harvest

The average amount of wheat harvested per poor household in Sharik yar for the 2003 harvest season was 350 kg. According to FAO report in 1999, Afghanis consume per capita more wheat than average, about 61 grams per day or 220 kg per year. The annual wheat production required for Aybak districts population of 87670 people estimated to be 19,300 metric tonnes per year. This is not including amount of seeds of households will keep for planting next growing season.

Location	Wheat		Barley	
Samangan province	**Cultivated land**	**2002-2003 Yield/ha**	**Cultivated land**	**2002-2003 Yield/ha**
Irrigated land	13440 ha	1282 kg/ha	370 ha	1137.5 kg/ha
Rainfed land	16700	455 kg/ha	200 ha	630 kg/ha

Traditionally, Afghan farmers have produced their own seed by saving and selecting part of their harvest for the next growing season. This practice is still dominant in most of the country. Seed varieties and shortage of fertilizer are frequently quoted as reasons for declining yields. Furthermore, farmers of this area believes that most indigenous varieties are low yielding and susceptible to diseases. However, there is no research supporting this and the farmers do not know, if the new varieties will have the same yield with time either.



As one household was sharecroppers, the amount of yield kept by households can differ from the actual harvested. In Sharik yar, 16 households (80%) own their land (an average land holding was (102 Jerbis).

The graph on the left, presents the average amount of yield retained by the household. It is disaggregated by wealth to understand relative differences in food availability by socio-economic groups. However, the data shows that "Poor" households had the least average yield (50 seers) in comparison with wheat kept by the "middle" households (150 seers) and the "wealth" income households averaging 350 seers. (1 seer=7kg). However, this graph does not necessarily represent the food security.

FOOD SECURITY PERCEPTION

Household perception of food security is strongly related to actual food security. Eleven households (55%) felt they were not able to buy/cultivate enough food in the past four months (35% of these were "poor", 15% from the "middle" and 5% "wealth" households). Furthermore, 5% of households worry how they would purchase/cultivate food. None of the household felt their situation was worse compared to one year or four months ago. Nonetheless, Enumerators observed that (35%) of the "poor" households did not appear to have enough food to survive the winter. None of the interviewed households thought the food security would worsen over the next four months, though many expressed uncertainty about how they could predict changes in food security in their home.

PERCEPTION OF FOOD SECURITY INDICATORS	**Percentage** out of 40 households
Consider food situation to be **worse** than 4 months ago	0
Consider food situation to be **worse** in comparison to one	0
Consider food situation **not** to be **enough** in the last four	55
Worried where their food was coming from at the time of the	5
Think the food situation will be **worse** in the next 4 months	0
Enumerators thought households did **not** have **enough** food	35

CONCLUSION: FOOD SECURITY

Due to household's illiteracy, unemployment, poor infrastructure, lack of resources of agricultural production, such as inputs (seed and fertilizer), capital, credit, training, extension and market distance. Food insecurity is one of the major problems as households do not produce enough food to last until the next harvest. Households also lack adequate water and cash income to buy food to enhance nutritional security.

In Sharik yar, in order to survive people are reducing diversity in food (diet), skipping meals and eating poverty foods (dry bread), forgoing medical treatment that they can not afford, sacrificing hygiene and going further in to dept to make a meal. However, despite the ethnicised conflict farmers are still pursuing their traditional livelihood activities and farming system with difficulty conditions. In some of the surrounding areas the conflict forced farmers to leave traditional resources behind due to the local armed commanders and to search for other alternative livelihood. The psychological effects are striking among the farmers; a lack of self confidence, a tendency to keep a low profile, frustration in view of limited life opportunities are widespread in these non-stabilised areas.

Uncertainty and political insecurity certainly prevents farmers from long term investment plan, as a results, in Sharik yar rural to urban domestic migration becomes an option when drinking water source, crop production wage opportunities fail. This is because, farming practices are more oriented towards risk minimisation or high return in short time. In Sharik yar, household assets have been depleted in order to cope with food security. For a range of reasons the poor and middle households are losing control over productive assets, including land and family members. Dept burdens and economic problems are limiting poor household's access to credit a key coping strategy.

The immediate supports for the poor and middle households are as follow:

- Cash for work programs are needed so at least a member of households can access commercial food
- As part of the broader program of public and food security, water projects are needed in this area so that the health and basic crop production of the poor and middle households are promoted

The future support to improve the food security of this sentinel site is revival of the crop production by ensuring the following:

1. The availability and distribution of inputs (improved seed, fertilizer, tools). A priority needs to be placed in developing quality improved staple crop seed varieties that is suitable to the local environment conditions.
2. Shortages of water have impacted negatively on health, hygiene and food security. Food security in Sharik yar today is primarily a function of the household's ability to retain control over access water.
3. Capacity building through information and skill transfer, training the farmers of Sharik yar community is fundamental.

RISKS TO LIVES – SHARIK YAR

The risk to lives section of this report highlights areas in the country where individuals are more at risk of dying and understanding the reasons behind this increased risk. It particularly focuses on better understanding the links between nutritional risk, food insecurity and mortality.

MORTALITY INDICATORS:

The current crude mortality rate (CMR) of 0.5 in sharik yar it is not above the emergency threshold rate of 1.0 deaths/10,000 people per day and the normal developing country level of 0.5 deaths/10,000 people per day. The under-5 mortality rate of 0.5 does compare favourably with the stable developing rate of 1.0 deaths/10,000 people per day and is not above the emergency threshold rate of 2.0 deaths/10,000 people per day.

Because of the high rate of maternal and child mortality, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. Of the number of children born in the last 4 months, the percentage of births attended by a skilled birth attendant is 20.0%. This figure, however, is not likely to include stillbirths or children who died during the last four months as a result of the difficulty of obtaining such information.

RISKS TO LIVES INDICATORS	**Percentage (%)**
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10, 000 / day)	0.5
Under 5 mortality in last 4 months (Deaths / 10, 000 / day)	0.5
Births in last 4 months attended by a Skilled Birth Attendant (n=8)	20
Morbidity Indicators	
Children < 5 years with watery diarrhoea (n=21)	9.5
Children < 5 years with bloody diarrhoea (n=21)	4.8
Children < 5 with ARI (n=21)	14.3
Children between 6 and 59 months with measles vaccination (n=21)	100.0
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate) (n=42) (n=26)	0.5[1]
Children > 6 months and <59 months with Oedema (n=21)	0
Children > 6 and <59 months with severe acute malnutrition (n=21)	0
Children > 6 and <59 months with moderate acute malnutrition (n=21)	0
Children > 1 year and <59 months with a MUAC under 13.5 cm (n=21)	4.8
Children > 1 year and <59 months with a MUAC under 12 cm (n=21)	4.8
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm (n=23)	39.1
Reproductive age women (15-49 years) with a MUAC < 21.0 cm (n=23)	8.7
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt) (n=20)	0

MORBIDITY INDICATORS:
The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhea among children under five years of age at 9.5%, is cause of concern. The presence of bloody diarrhea in 4.8% of the children in the village indicates a more serious concern.
Many of the cases of diarrheas disease might be attributed to hygiene practices and a shortage of water. The percent of children under five suffering from Acute Respiratory Infections is 14.3%. Measles vaccination coverage in Afghanistan is 95%, and MOH figures for the Aybak district report coverage to be 85% on June 20, 2003. The measles vaccination coverage of 100% in this round of data coverage is consistent with other figures.

CHILDREN NUTRITIONAL STATUS:
Using weight for height percentage of the median, the data shows no Global Acute malnutrition (GAM) for children between 6 to 59 months. None of the children were found to be severely malnourished (less than 70% weight-for -height percent of the median), moderately malnourished or suffering from oedema.

Children classified as moderately malnourished by MUAC measurements (less than 13 cm) are potentially at risk of mortality. About 4% of the children in the survey were reported to be malnourished (less than 13 cm). This figure along with the weight-for- height percent of median suggest that acute malnutrition for children in this age group was not a cause of concern for the village.

[1] (CI: 0.43 to 0.61): The confidence interval is calculated for a random sample with a small (finite) population.

ADULT WOMEN NUTRITIONAL STATUS:
Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. The data shows, in Sharik yar 39.1% of women have a MUAC below 23.0 cm and 8.7% of women have a MUAC below 21.0 cm.

MICRONUTRIENT DEFICIENCIES:

H6

The presence of iodised salt in the house is a proxy for the use of it and also therefore of iodine deficiency. No households had iodised salt as all salt was locally mined block salt during the survey. However, the iodised salt is not available for this village.

HEALTH FACILITIES:

The table below lists the health services or facilities that are available to the people in Sharik yar area. However, there are no health facilities in Sharik yar itself and all the residents of the neighboring villages travel to Aybak City (Provincial Capital City) to use Aybak City's health services. Aybak city has one hospital and four comprehensive health centres and number of private doctors. People travel there with public transportation, the cost of getting to Aybak city from sharik yar is 1500 afs. In an urgent situation, they travel by tractors and trucks.

In Sharik yar itself, there are number of traditional birth attendants (TBA) to help the village women with birth deliveries. The birth attendant usually comes to the woman's house for services. The common custom of TBA in this village and the surrounding areas is that there are no fixed charges for the TBA services and, as such, every household pays what they are able to afford and in accordance to their class in the community. The TBA fee ranges from nothing to 100 afs and can be in cash or kind. Many households in this village pay to their TBA services using food and no-food items.

All the Government health services in Aybak City are free of charge, and as a result they are used largely by low and middle income families. The wealthy class of Sharik yar and the surrounding area goes to private doctors which charge 40 Afs for a visit. Many people believe that the services of a private doctor are better than those of the government and if one is able to afford 40 Afs he/she should go to the private doctor. Medicine needs to be paid for in both cases. There are also skilled birth attendants in Aybak City hospitals and additionally there is a private service that people may use in the case of severe emergencies or complications. This type of private service is very expensive. Travel to Aybak is possible in all seasons, including winter.

Health Facilities Table

	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts	Aybak	Two to three hours	150	Everybody	Same
Basic Health Centre	Aybak	Two to three hour s	150	Everybody	Same
Comprehensive Health Centre	Aybak	Two to three hours	150	Everybody	Same
Hospital	Aybak	Two to three hours	150	Everybody	Same
Traditional healers/Birth Attendants	Sharik yar	Five minutes	0	Women	Same
Skilled birth attendant	Aybak	Two to three hours	150	Everybody	Same
Private doctor	Aybak	Two to three hours	150	Everybody	Same

The use of health facilities has stayed constant in the last four months.

WATER SOURCES:

In sharik yar village, the public sources of water are open wells and Kanda . In addition to that, most households have wells in their houses. Those who do not have wells in their houses, obtain water from the village's Kanda. The Kanda are usually located near the mosques and in most cases it is the men of the family who bring water from the Kanda to the household. The people reported that from the Kanda and open well the quality and the quantity of water available have stayed the same in comparison with last year.

The main priority for the village is to get more access to clean drinking water through the construction of more hand pumps or deep wells.

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
Kanda	Less than hour	Same	Same
Open well	Less than 30 minutes	Same	Same

SANITATION FACILITIES:

There are three common types of toilets in the Sharik yar area: open area, vault latrine and deep

47

latrine. The majority of households have a deep latrine toilet in their houses. The vault latrine is usually located in public places like schools and mosques and is always separate for men and women. The very low income households of Sharik yar who can not afford to build a latrine have an open area toilet.

CONCLUSION: RISKS TO LIVES

The crude mortality rate is not above both the emergency threshold rate of deaths people per day and the normal developing country level of deaths people per day. Furthermore, for children under five years of age, the mortality rate does compare favorably with the stable developing country rate and is less than the emergency threshold rate of deaths people per day. However, condition of chronic health problems were very common the surrounding area.

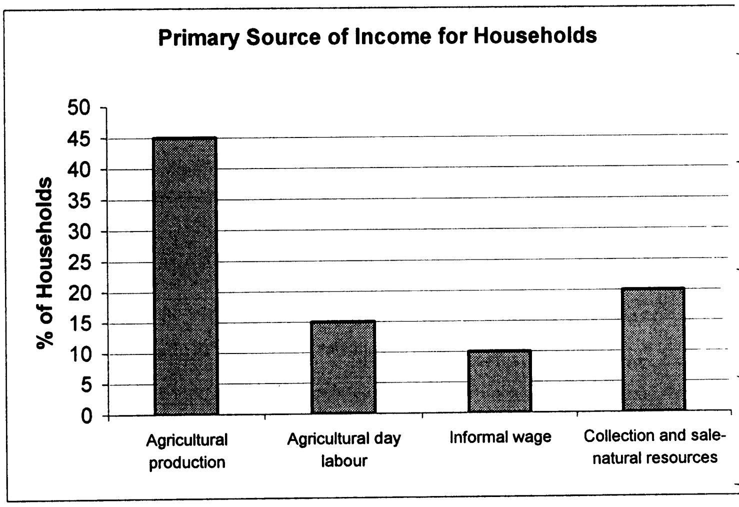
In Sharik yar, water and sanitation are completely inadequate. Presumably, the rates of water diarrhea can be attributed to these two factors. This should be improved as rapidly as possible. Adequate preventative and curative health facilities and services should be available and accessible to the village community.

Extended programme of immunization (EPI) is needed. Measles vaccination coverage is poor and is probably interesting to know if it is interrupting measles virus transmission. Moreover, community training in public health; traditional birth attendance training and providing basic tools, health and hygienic promotion, subsidized medical treatment and basic drugs for women and children is essential as is introducing the community to toilets and other sanitation programmes that will improve the condition of Sharik yar 's health problem.

LIVELIHOOD SECURITY - SHARIK YAR

INCOME SOURCE PROFILE:

The primary income source of most households in Sharik yar during the period of June to September 2003 was agricultural crop production, followed by agricultural day labour and collection and sale of natural resources.



Of all Sharik yar households, 45% stated agriculture production as their primary income sources. 88% of "wealth" households and 25% of "middle" income households also reported it as an income source. Collection and sale of natural resources was the second most important livelihood primary source for "middle" and "poor" households. Wealthier households gained some income from livestock. Agriculture day labour and informal wage labour were important primary sources of income for the "poor" households.

The table below captures the percentage of households engaged in different activities. This provides an indication of the relative importance of different livelihood strategies to the community. Agriculture production is of primary importance as 75% of all households gain income from this activity(20% of these households were "poor", 10% from the "middle" and 45% "wealth" households.

Livestock production provided income for 70 % of households, while agriculture day labour and collection of natural resources provide income for 45% of households. Other important sources of income practiced on a smaller scale include: Non-agricultural day labour, informal wage, rental and taking loan.

44

n=40 Households	Percent of households with Income Source	Percent of households with Women's Income Source
Spinning/ Carpets Labour	0	5.0
Trade / Shops	0	--
Spinning/ Carpets Business	0	--
Agricultural Labour	45.0	--
Agricultural Livestock	70	5.0
Take a Loan	5	--
Microbusiness	0	--
Agricultural Crops	75	--
Non-agriculture day labour	30	--
Collection–natural resources	45	--
Formal Wage Labour	0	--
Informal Wage Labour	15	--
Remittances	0	--
Rental Income	5	--
Gifts/Gleaning	5	2.5
Repayment of Loan	--	--
Begging	--	--

Data regarding women's income activities can clarify the role of women in current livelihoods strategies and identify potential for future involvement. Some women (5%) made carpets for a wage, followed by livestock and the collecting and selling of the natural resources.

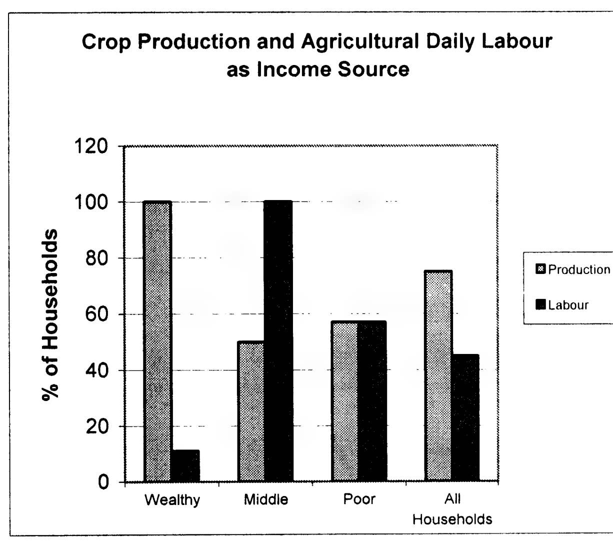
Carpet labour was the best female contribution to household income for women of "poor" and "middle" wealth categories. In "poor" and "middle" households carpet weaving accounted for 18% and 20% of income generation activity respectively. No "wealthy" women household was engaged carpet making for labour.

Both trade and collecation of natural resources and keeping livestock were important income sources for "poor" and "middle" income households. Furthermore, activities most important to men tended to be less important to women. However, all women received money from gifts/gleaning men of all wealth groups did not consider an income source.

Female headed households were very poor. The main problem is illiteracy, unemployment, poor infrastructure, lack of resources. A number of widows will receive wool material from GOAL for making gillams and carpets

CROP PRODUCTION AND AGRICULTURAL DAILY LABOUR

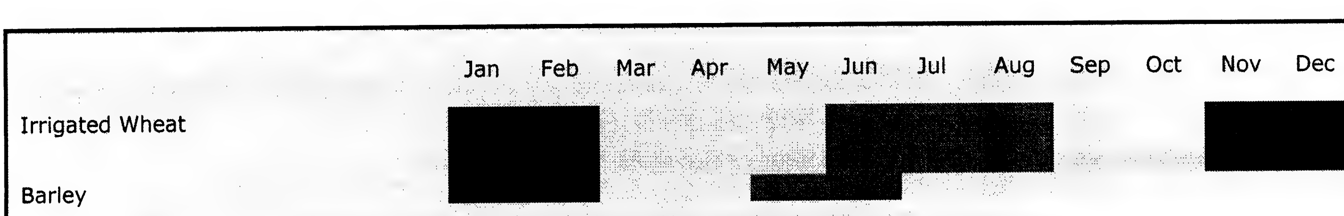
Crop production and daily labour were the main sources of income and have a major impact on the livelihood of the "poor" Sharik yar households.
The graph on the right demonstrate the percentage of households of all wealth groups for both crop production and agriculture labour.



Rainfed wheat and barley are the two main crops in the area. "Poor" households, 57 households generate their income from agricultural labour, where 57 % were engaged crop production. For "middle" income households 50% generate income from crops production, where 100% were engaged in agricultural labour". All "wealthy" households grow crops, 10% of "wealthy" household were engaged in agricultural labour. Most of "middle" households tended to be oriented toward labour rather than crop production. Agricultural labour throughout the year brings in a wage of between 75 to 200 afs per day, but during the harvest, instead of a daily wage in cash, people are paid in wheat or barley.

Crop Seasonal Calendar

The main crop food staples grown in Sharik yar are rainfed wheat and barley. The table below shows the crop calendar for rainfed wheat and Barley in the area. Wheat is normally harvested during the months of June, and July. Where, Barley is harvested during the months of June. Wheat and barley are planted in the area only in the winter.



49

Spring Planting Harvest Winter Planting

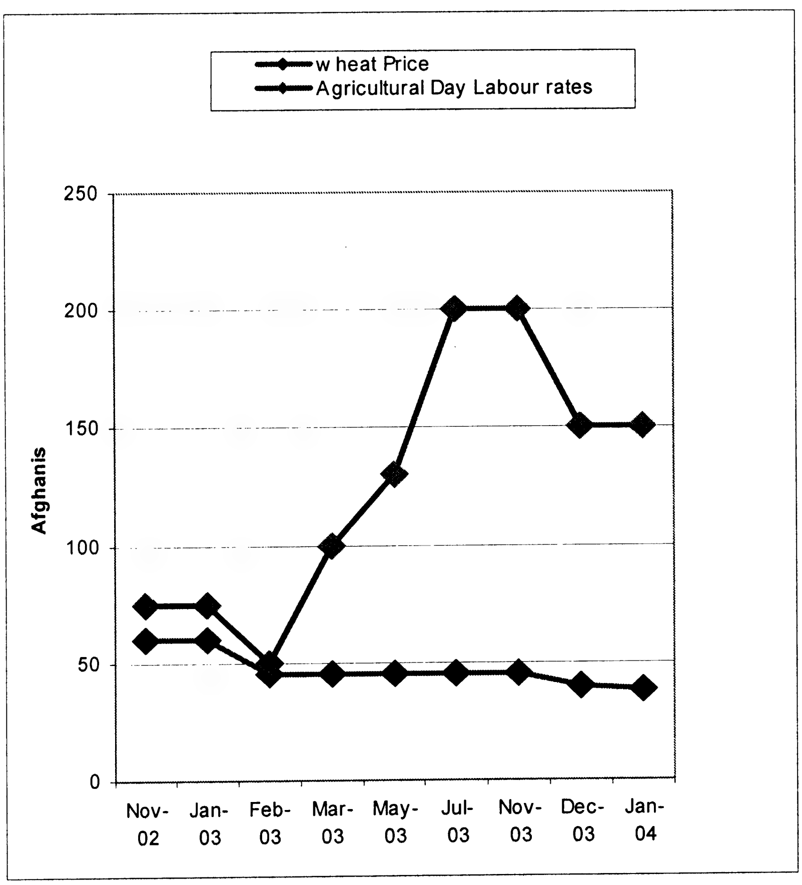
Crop Production Assets: Land Ownership and Draft Oxen

Land ownership is the key prerequisite for agricultural production. In Sharik yar village, 75% of households own land (average holding, 102 jeribs) and one is sharecroppers who must share his seasonal crop yields. Wealthy households (100%) own 44 jiribs of rainfed land on average and 11 jiribs of irrigated land, "Middle" income (50%) of households owned 50 jiribs of land, compared to (57%) of poor households with 14 jeribs of land on average. Though draft oxen are extremely important to household crop production, no households owned oxen

	All Households	Wealth	Medium	Poor
Households owning land (%)	75	100	50	57
Average amount of land owned (jeribs)	102	44.4	50	14.3
Households owning irrigated land (%)	5	11	0	0
Average amount of rainfed land owned (jeribs)	2	44.4	50	14.3

Shocks to Agricultural Yields

In Sharik yar, one household (5%) reported 20-50% of crop losses. None of the households reported more than 20-50% crop losses. However, it seems the crop losses were specific to the one household, but the village leaders reported high level of crop production in the four months prior to the survey.



Market Prices of Agricultural Goods

In Aybak city market, wheat prices remained constant from February 2003 to January 2004. The current price of around 38 Afghanis per seer (7 kg) is slightly lower than January prices.

As the graph on the left demonstrates, agriculture day labour rates are highest during the harvest, compared to planting time (November to January).
During 2003 planting season, the daily labour wage was 75 Af's, though 2004 rates during planting have since doubled (150 Af's).

Daily labour increased from March 2003, reaching a high of 200 Af's per day from July to November 2003. This period corresponds with spring planting season and the harvest of winter crops. Should wheat prices remain depressed while agriculture labour rates are inflated, input cost will rise so that farmers are forced to stop growing wheat.

LIVESTOCK

Livestock ownership is a source of income for 14 (70%) households in the area.

Of these households, Most (9) were from "wealth", 5 from "poor" households and 4 were from "middle" income households. Ownership of livestock is the primary income source for only 5% of households in the village, though 70% of them report it as an income source. A previous study in March, 2002 showed that livestock populations in Afghanistan have declined by 60%, whilst in Samangan it has been estimated to be 80% average losses of all animal stocks. With calving and lambing rates ranging between 30 to 80%, the number of animals is slowly climbing, but is still not close to the pre-drought figures. Animal livestock does need to be replenished through longer-term breeding programmes, credit initiatives, loans or other schemes that will allow the farmer access to funds to purchase new animals.

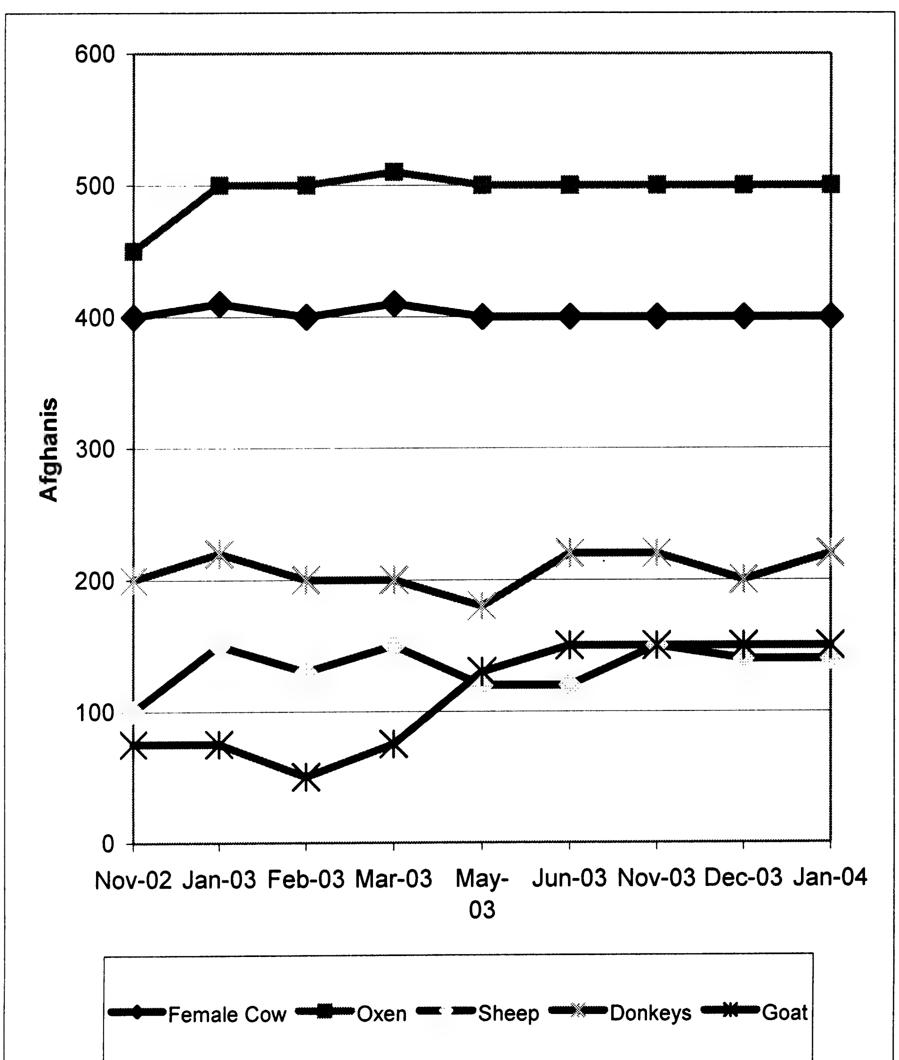
	Goats	Sheep	Cows	Donkeys	Hors
Average Number Owned "Wealth" household	16.3	55.3	1.5	2.2	1
Average Number Owned "Middle" household	8.0	13.0	0	1.5	0
Average Number Owned "Poor" household	3.5	9.8	1.5	1.6	0

Livestock disease

When asked about livestock diseases, village leaders noted that sheep and goats were affected by sheep Pox and cattle sometimes suffered from foot and mouth disease. Only 50 heads of cattle were owned in Sharik yar, 50% were said to be infected with foot and mouth. However, no cattle were observed with the disease and no households offered evidence that any animals had died. Foot and mouth cannot be ruled out in Aybak district since this has been a problem in the past, but more evidence is required to support the claim that this disease is still a problem.

There are 600 heads of sheep and goats in Sharik yar, with 250 (42%) suffering from sheep and goat pox (SGP). Symptoms include skin lesions through all skin layers, persistent fever and lymphadenitis. The disease can be acute or chronic, evolving to generalized lesions through skin and mucous membranes and focal (viral) pneumonia characterized by lesions uniformly distributed through the lungs. One of the largest viruses,

No vaccination clinics have occurred in the last four months, though a veterinary clinic and hospital exist in Aybak city. Medicines are not available provincially to treat the condition, and vaccination is the most effective way to prevent animal losses. Of available vaccinations, the most effective seem to be the Romanian and Kenyan O 180 strains that offer best safety and efficacy (Jubby et al., pp. 466-469). Killed vaccinations have little practical effectiveness since field research suggests that they do not provide lasting immunity from SGP.



Livestock Prices

Sharik yar and surrounding villages rely on the Aybak city markets livestock sales and purchase.

As seen on the left, both qaraqal sheep and cow prices remained stable from November 2002 until January 2004. However, oxen prices increased between February and January 2004. Goat prices were stable at approximately $150, with seasonal variation.

Donkeys are considered the second most important animal to own, and prices tended to remain stable around $220, though some seasonal variation existed.

Grazing land and Access to Water

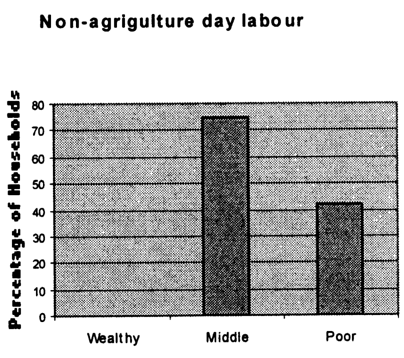
According to village leaders, access to grazing land has increased in the four months prior to the survey. Grassland productivity has been similar to previous years, whilst access to water increased. However, water shortages between 1999 and 2002 did play a role in subsequent animal losses. Unfortunately, local authorities were not able to use changes in grassland and water access to predict future threats to livestock. Increased awareness of threats to grazing land access might

57

have allowed communities to protect themselves better against drought related animal losses. In addition, common grazing land is sometimes compromised by illegal cultivation of rainfed wheat. This practice can also compromises community animal stocks.

COLLECTION AND SALE OF NATURAL RESOURCES
Nine households collected and sold natural resources. Of these, three were ''poor'', three were ''middle'' and three ''wealthy''. All nine households collected and sold bushes, asafo and animal manure. Furthermore, the data shows that two 'poor'' households collected and sold Cumi. Livelihood activities were negatively impacted by recent drought. Lack of rain meant that bushes did not grow as well, and fewer animals led to a reduced amount of dung available for collection. The future availability of these resources did not appear to be compromised since animal stocks would be replenished, and bushes are cut above the root system so that they would grow again after the rains. Despite the drought, bush prices have remained stable, but fewer households collect this resource as market rates for day labour are more profitable for households.

Non-Agricultural Labour(skilled and unskilled manual labour)
In Sharik yar, 30% of households claimed manual labour as an income sources. Most (4) households were from ''poor'' households, followed by ''middle'' income households (2).
The table to the right demonstrates non-agriculture day labour, no ''wealthy'' household was engage in non-agricultural day labour. The two ''middle'' households, reported an income increase where, the ''poor'' households, three reported an income increase and one households reported an income decrease.



Informal Wage Labour (shepherd, driver)
Three 'poor'' households have formal wage labour as an income source. All three households which have a formal wage as an income reported an income decrease.

OTHER INCOME SOURCES
In Sharik yar, no household reported Remittance, Loan repaid, Begging and Mortgage as an income sources or formal wage.

Rental income (land, house, shops, agriculture equipment)
One ''wealthy'' households collected rental income as sources of income and the income stays the same.

Loans
One ''wealthy'' households took loan as sources of income and reported an income decreased.

Gifts/Gleaning
One households from ''poor'' wealth reported gifts/gleaning as income source. The household reported income increase.

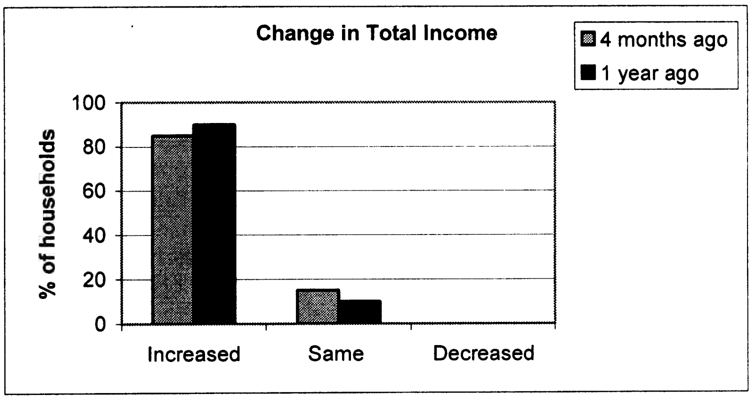
Migration
In Aybak district, the total returnee from October 2002 till October 2003, according to the OCM/PIK-EC were between3313 to 2197. Furthermore, the UNHCR data collection of November, 2002 to November 2003 returned Internal Displaced People (IDP) was 207 people. In comparison, our data shows no returnee was reported in Sharik yar for the last 4 months.

Transport
In Sharik yar village is within the Aybak city and there is transportation problem. People walk to the city daily with animal and hire all the public and privet taxes. People in Sharik yar have access to transport in the morning and at the evening only. It seems People can afford the present public transport fee for round trip of 20 afs and it costs 300 afs a round trip taxis fee.

52

GENERAL LIVELIHOOD SHOCKS or CONSTRAINTS:

The graph on the right shows that none of the households income have decreased for the last four months and year ago. In the previous year, only 10% of households' incomes stayed the same. Income increases followed the same trend: Only 85% households reported an increase in the last four months compared to 90% in the previous year. This suggests livelihoods are not secure yet. Households with steady incomes did not share similar livelihoods, thus it does not appear that a specific shock is responsible. Instead, this might be normal variation. The coping strategies included here are by no means inclusive of all strategies invoked by households to survive tough times; instead, it focuses on behaviours predictive of declining livelihood and food security in Afghanistan that can be easily measured.



The list was divided into erosive and non-erosive coping strategies in order to understand impacts on households' future livelihood security. The division is not mutually exclusive as the loss of a bicycle, motorcycle or car may also impact future opportunities. Similarly, the order of the list does not reflect a continuum of behaviour. The coping strategies listed are meant to be general indicators of a worsening situation, however, households experiencing chronic and transitory poverty who engage in these activities on a regular basis.

Non-Erosive Coping Strategies (last four months) (n=40)	**Percentage**
Household members worked more hours to make daily expenses	30
Households who borrowed food from relatives to make a meal	20
Households who had been consuming dried bread	5
Erosive Coping Strategies (n=40)	
Household took out loan	5
Household who took food on credit from shop	35

Non-erosive coping strategies

In order to meet their expenses, no households sold non-productive assets such as gillams, carpets. Less than half (30%) of households engaged in longer hours of work. Food consumption patterns and sources of food are also key indicators of household vulnerability. 5% of the families interviewed had been eating dried bread, which clearly highlights a situation of food insecurity. In addition to changes in food consumption, most of the families needed external support to food needs. 20% of the families had to borrow food from their relatives in order to make a meal in the last four months. In the same way, up to 35% of the households took food on credit from local shops.

Erosive and distress coping strategies

It is apparent that strategies adapted by households to deal with shocks varied with individuals, households and villages. In Sharik yar, 5% of households took loans as a coping strategy to meet daily expenses, while 35% of households took food on credit from local shops. It is apparent that both "poor" and "middle" households are extremely vulnerable as they jeopardize future production capacity to cover immediate needs.

Income Diversity and Capacity to Cope – Risk to Livelihoods

Household capacity to absorb shocks and to adapt stresses induced by climate, price instability, unemployment and complex emergencies such as political crisis. However, households with various income sources are better able to cope than households who rely on one or two income sources. The income diversity score is simply a count of the number of income sources for each household. In Sharik yar, households have an average income diversity score of 2.9. In many cases the wealthier household often scores higher an income diversity measures, however, in this situation all wealth groupings have a similar score. The main sources of income in Sharik yar were crop production, livestock production, collection and sale of natural resources, agricultural day labour and non-agricultural day labour

	Average Income Diversity Score
Wealth	2.7
Middle	3.8
Poor	2.9
All households	2.9

CONCLUSION - LIVELIHOOD SECURITY SUPPORT

Sustainable livelihood requires citizen's participation and methods that will promote to enable the people to make decisions on issues that affect them and their immediate surroundings. Rebuilding village livelihood is diverse and huge task that calls for interventions in every sector of society. However, its primary use is therefore to choose between these many interventions.

55

Sharik yar is one of the priority area relative to the other parts of Aybak district (Dara e-zandan).Household livelihood is not secure and is declining. Personal assets (health and age of family members) are important factor of how poor households with less access to ecological and political assets cope with livelihood strategy. Household members worked more hours to make daily expenses, crop production, livestock production, collection and sell of natural resources, agricultural day labour and non-agricultural day labour, taken loan were common coping strategies to secure livelihood. It is interesting to note that most household chooses a combination of these strategies as a way to fulfill it needs.

Finding the highest priority for intervention is not easy. Boundaries are shifting in Sharik yar, as significant non-farm activities appear in poor households, however, there were a number of observations about the relative importance of agriculture programmes for getting out of poverty in Sharik yar households. The centre issue has been that profits and skills gained in agriculture can help sharik yar household's move into better livelihood security. Among poor households off-farm income was main target to fund entry into cash cropping, and household with more income diversity have higher agricultural productivity.

The economic role of women within Sharik yar and the surrounding area remains underdeveloped. Sericulture and apiculture are sectors of the village economy in which women have traditionally played important roles, but both sectors have been badly neglected. These industries require urgent rebuilding and rehabilitation, since both sericulture and apiculture represent economic opportunity for the landless and the rural poor potential alleviation of poverty.

Samangan Surveillance Unit

National Surveillance System (NSS)

Transitional Islamic State of Afghanistan

Ministry of Rural Rehabilitation & Development, Ministry of Agriculture & Animal Husbandry & Ministry of Health

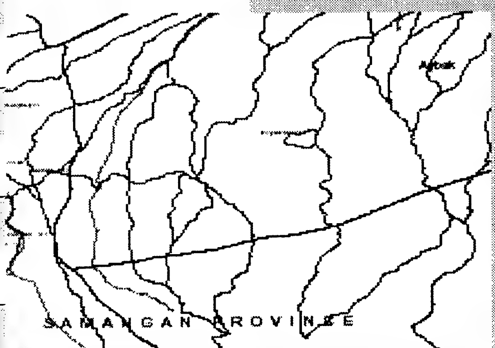
Hazrat Sultan District
• Sarqia Afghania Sentinel site

Fall 2003

SUMMARY FINDINGS FOR SARQIA AFGHANIA SENTINEL SITE IN SOUTHTHERN Hazrat Sultan DISTRICT (These findings are based on field survey of 20 households and Sarqia Afghania village leaders' interview. These findings should not be assumed to representative of other parts of Afghanistan)

AIMS

Afghanistan Samangan Province



Contents of Bulletin

The report is organized so that for each sentinel site in Kohistan, key indicators representing the main components of each of these three categories are presented and discussed in a narrative format.

Food Security

- No household consider the food situation worse than four months ago or one year ago. However, 55% of households did not have enough to eat in the past four months. Though none of the families interviewed felt that the food situation would be worse in the next 4 months.
- Nonetheless, 5% of households worried were their food was coming from. Many did express the view that they did not know how to think about such a matter. However, Household enumerators thought that 55% of the households did not have enough food to last through the winter. Most of these households were from the "poor" wealth households. Dietary Diversity is a concern of "poor" income households in the village. However, these concerns are based on the frequency of consumption reported by households.

Risk to Lives

- The crude mortality rate is not above the emergency threshold rate (1 deaths/10000 people per day) and the normal developing country level (0.5 deaths /10000 people per day). Furthermore, for children under five years of age, the mortality rate (0.5 deaths/10000 people per day) does compare favourably with the stable developing country rate (1.0 deaths/10000 people per day) and is less than the emergency threshold rate (2 deaths/10000 people per day).
- Morbidity patterns of children under five years of age were high (ARI: 38%, watery diarrhoea 50% and bloody diarrhoea 13%)

Livelihood Security

- In order to meet expenses, 10% of households sold non-productive assets. Other common strategies include working longer hours, household member migrated for labour and taken loan. Of the families interviewed, 5% consumed dried bread, a clear indication of food insecurity. Most families needed external support to find sufficient food. Most households (60%) were forced to borrow food from relatives and (80%) from the local shops to make a meal in the last four months.

What is the NSS?
The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs.

Methodology
The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the communities with respect to agro-ecological features, economic activities, available services and people in a given area (livelihood / agro-ecological zone). Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel may not be representative of every village in the zone. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same zone (See Annex I for detailed information on methodology).

OBJECTIVES OF REPORT

- Provide current information on household food security status in Hazrat Sultan District
- Provide information on risk to lives and nutritional risk of individuals in Hazrat Sultan District
- Provide information on the current household livelihood security situation in Hazrat Sultan District, specifically looking at current shocks to livelihoods and the ability of households to adapt to (cope with) these shocks
- Develop a better understanding of the vulnerability and risk of communities and households in Hazrat Sultan in relation to issues of food security, mortality, health and nutrition.

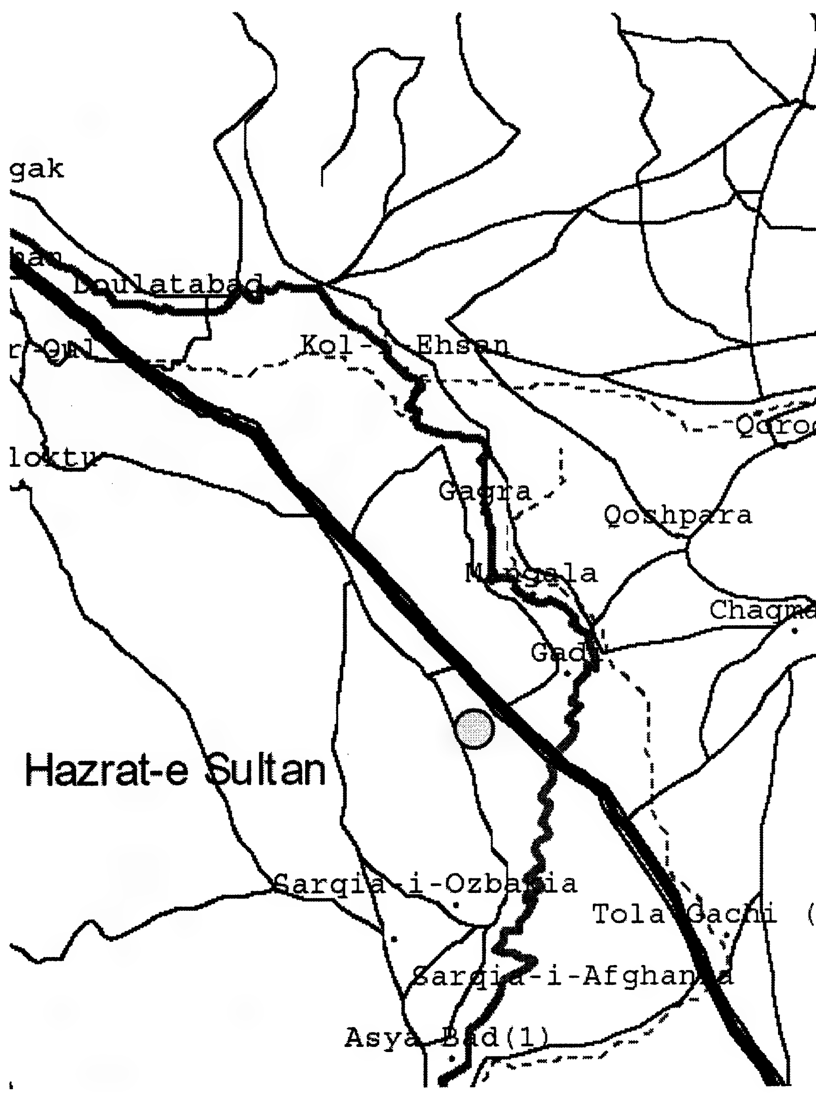
Additionally, this report provides baseline information on indicators that are unique to a local area and have not yet been explored in the depth needed for use in guiding programmes and policies. They are:

- Characteristics of household wealth in Hazrat Sultan District
- Livelihood Strategies employed in Hazrat Sultan District
- Presence of morbidity, mortality and malnutrition in rural communities in Hazrat Sultan District

And finally, the report aims to provide information on how government and other agencies can use this increased understanding of livelihoods, vulnerability and risk in order to design and prioritise effective policies and programme interventions.

LIVELIHOOD ZONES FOR HAZRAT SULTAN DISTRICT

Livelihood zones in Hazrat Sultan District can be divided into three distinct agro-ecological areas. These distinctions impact household livelihood patterns. Sentinel site was selected from each area. Most of the province consists of mountainous, rainfed farmland and irrigated valleys. However, this report will focus the three agro-ecological zones of Hazrat Sultan. This report includes information on each sentinel site from each Zone.



Zone 1: Rainfed Land (39 villages): Chochman: This Zone covers South west of Hazrat Sultan. Livestock and rainfed wheat and barley are the main source of agriculture production. The surrounding villages share similar livelihood.

Zone 2: Grazing Land, Irrigated and rainfed land (65 villages): Sarqia Afghania Zone two covers the South of Hazrat Sultan. Sarqia Afghania and the surrounding communities share similar livelihoods and are located in river/canal-irrigated downstream valleys. The source of water is river that runs though Khuram Wa Sarbagh to Sarqia Afghania. The river water is used for both irrigation and household consumption. Livestock, wheat and barley crops are the main source of income for these villages, but they also have intensively irrigated small-scale horticulture production during the summer.

Zone 3: Mixed Mountainous and down stream valleys (16 villages): Nawabad Qaracha Bolaq: Zone three covers the South Eastern section of Hazrat Sultan. The area called Qoroq (fertile soil and high water table leval). A large number of springs feed into irrigation systems, allowing for small plots of intensive agriculture. Beside, the wheat and barley crops the area are a famous producing sweet melon, water melon and squash.

GENERAL SARQIA AFGHANIA INFORMATION

Sarqia Afqhania is the village chosen to represent Livelihood Zone two in this report. It is the sentinel site chosen to represent the 21 villages of the South of Hazrat Sultan centre and is located at an altitude of 1500 meters.

	Average Household Size
Wealth	**7.0**
Middle	**6.6**
Poor	**5.6**
All Households	**6.2**

The majority of Sarqia Afghania settlement identifies themselves as Pushtoon and speak Pushton language. The village currently has only one mosque and 50 households. Of these households 48% are male and 52% are female. Household sizes differ with wealth, wealthy households tend to have more family members compared to middle and poor households. Most poor households tend to split into nuclear households when member of the households get married. Furthermore, wealthy men can afford to married more than one wife.

In Sarqia Afghania village has only one primary school for boys (1 to 6th grade). The school is within a relatively short distance and the students are able to walk there. The School has four classes and each class has between 50 and 60 students. There was a girls school in Sarqia Afghania before the war. In general, girls experience war and displacement differently from boys because of their culturally defined social roles and expectations. Girls were more reluctant to attend school here when safety concerns existed and were the first to drop out when the family resources became scarce. Their safety was at risk while they were commuting to and from school. The gender based educational incentives have worked most of Hazrat Sultan villages in the past.

The community categorized households into three different wealth groups, or socio-economic categories. The table on the right describes the type of features characterizing each wealth group and the percent of households falling in each category.

These socio-economic groups will be used throughout the report to understand how food security, livelihood security and risk to lives may be different for households of different socio-economic status.

Wealthy Households: 20 percent (4 households)

Households that have more than 20 sheep, cows and goats. And having more rainfed land, tractor or car,

--women—

These households have between 40 sheep, cows , donkey, and having rainfed land(51 jiribes), with more than two sources of income

--men--

Middle Households: 25 percent (5 households)

These households have only one house, donkey, cow and sheep. They have whatever is needed in their houses.

--women--

These households have land, have a house and limited number of livestock (10 - 20). They don't do daily/manual labour jobs, but some often engage in casual labour.

--men--

Poor Households: 55 percent (11 households)

Household with limited assets. Households who are casual labour and have no access to land.

--women--

Household who have no assets or with limited livestock and working as casual labour.

--men--

The Qaruadar (village leader) Mullah Abdul Jibar has been chosen by the people of this village as a village leader. The leader of the village with the *shura* (village elders) group makes all the decisions and makes facilities for the community. Usually, all disputes within the village are settled by a group of village elders. They have administrative links to the Hazrat Sultan district and Aybak provincial administrator, which is 2 hours away by donkey or foot. The district governor is responsible for his district to the provincial centre, at this point, Aybak.

67

Most of households have a high number of dependants, particularly children and unemployed immediate relatives. However, the average household size and dependency ratio is higher in Sharqia Afghania like rest of the district.

Further more, social networks are essential for livelihood strategies. Women play a major role in reproductive and household's affairs. Children often help women with accomplishing some of their responsibilities. Men have more authority than women. Some men are engaged in wage employment. It is the men who have control over the large agricultural activities and who are involved in local community politics at ethnic or tribal authority level.

Gender was found to be critical in the household structure and processes that relate to rural livelihood security. The data shows unequal gender relations at household level. To a large extent, household headship determines the access of the household to assets and resources, division of labour, decision-making, power and livelihood strategies.

Female-headed households tend to diversify their activities to earn income in cash and in kind. Gender was identified as an important factor in using indigenous knowledge in enhancing livelihood security. Both men and women were found to possess indigenous knowledge. Women's indigenous knowledge is essential for ensuring household food security, maternal health and child care and income generation though weaving fiber clothes, production of carpets, and handicraft. Their knowledge is not limited in food production and post harvest processes. Men utilize their indigenous knowledge in agricultural production, carving and traditional medicines.

Assets and Activities	Wealth Group		
	Wealthy (20%)	**Middle (25%)**	**Poor (55%)**
Male Group perception			
Land	51 Jeribs	10-15 Jeribs	0-5 Jeribs
Sheep/goats	20	10-20	None – 2
House	1-2 rooms	1 room	1 room
Donkey	1-2	1	0-1
Water	Collect with donkey	Collect with donkey	Collect with donkey
Carpet	1-3	1-2	0-1
Gillim	2	1	1-2
Travel	Mazar or Aybak Market	None	None
Employment	People work for them	Does own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to the poor households	None	Receives Zaqat
Female Group perception			
Land	30-50 Jeribs	25-30 Jeribs	0-10 Jeribs
Sheep/goats	20	5-10	None
House	3 rooms	1 room	1 room
Donkey	3	1	0
Carpet	4-5	1	0
Iranian carpet	1	0	0
Gilim	4-5	2	1
Travel	Aybak	None	None
Employment	People work for her	Does her own work	Works for others
Remittances	None	Yes	None
Zaqat	Gives Zaqat to Mullah	None	Receives Zaqat
Clothes	Has several dresses	Has some dresses	Has less dress
Jewelery	Has many coins, a watch and bracelets	Has some coins (not silver)	Has none or two

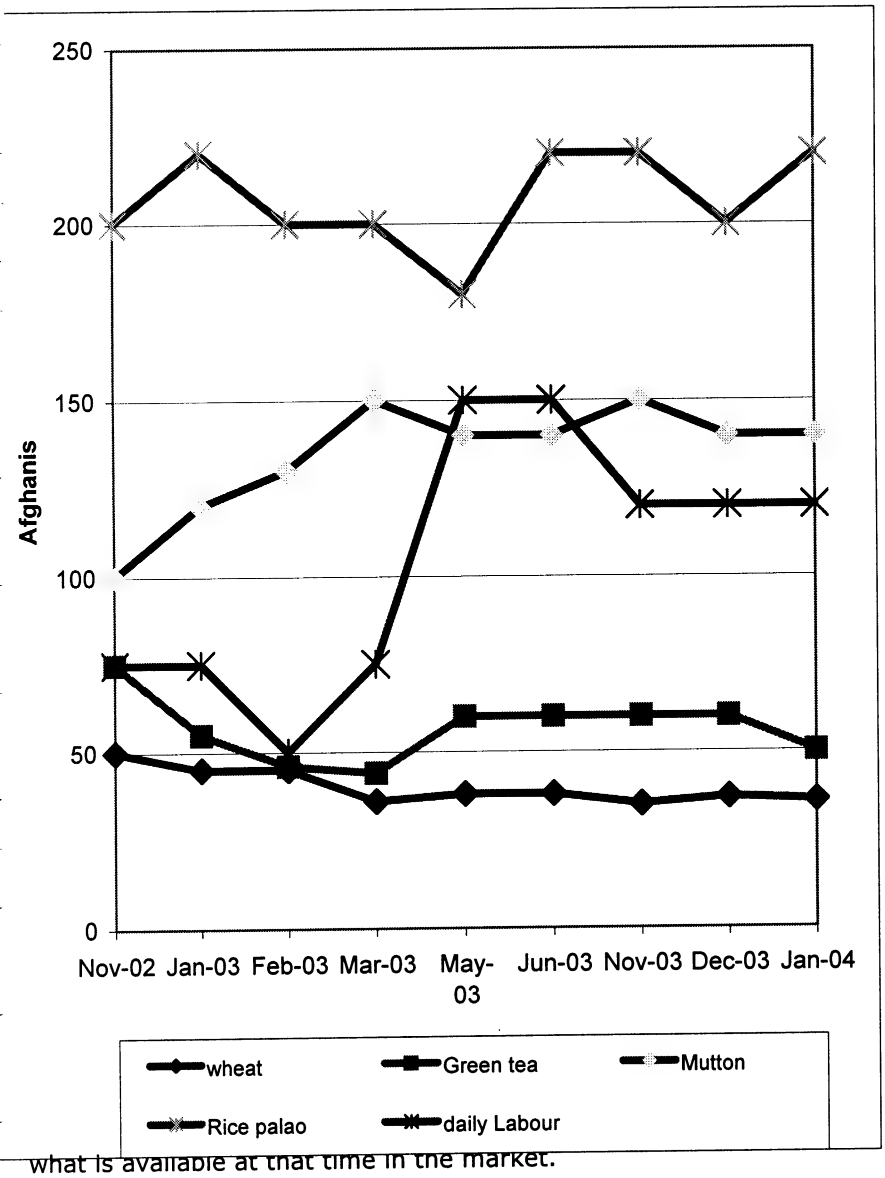
58

MARKET ACCESS

Aybak bazaar market is the closest main food market to Sharqia Afghania village and the surrounding villages. The roads are present and relatively good. The Sharqia Afghania residents can get some of the basic food items from the Hazrat Sultan bazaar. However, most of the households travel to Aybak for a lot of food and none food items. Medicine drugs are one of the main reason people always needed to travel to Aybak city and people prefer to do their shopping in Aybak city than the small bazaar in Hazrat Sultan.

Location of Market	Time taken to reach market		Cost of getting to market	Market Accessible in winter
	Vehicle	Foot		
Aybak centre	1 hours	Half day	60	Yes
Hazrat Sultan Bizaar				Yes

Most households send one household member to the market on a market day (Mondays and Thursdays, weekly) during, summer, spring and autumn. All the above markets are accessible all season or year round. The people from Sharqia Afghania go to the market to trade wheat and livestock and to buy both food and non-food items. Transactions in the market take place using cash. However, both market bazaars people can trade non cooked food items such as agriculture crops to other items that they want buy.



MARKET PRICES

Sarqia Afghania households rely on Aybak market for food and non-food items, 70% of households purchase wheat. Wheat prices have been stable over the past year and impact daily labour rates since many workers are paid wheat for work. When prices decrease, whilst labour rates increase, it becomes more profitable to work for wheat compared to growing own crop.

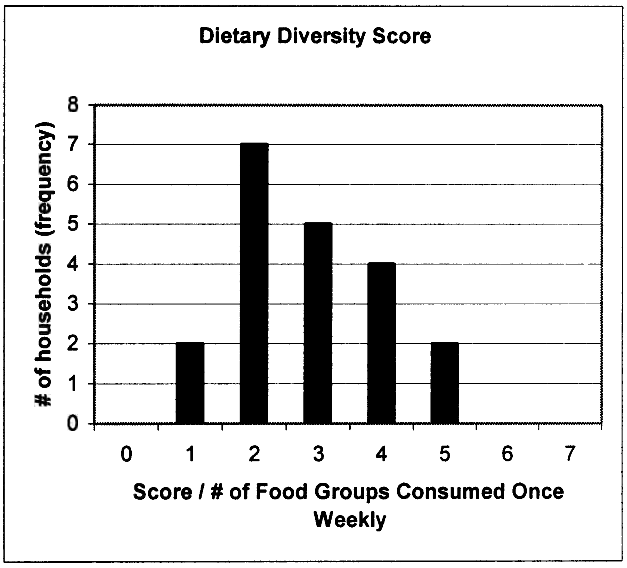
As shown on the graph to the left, wheat and green tea prices have been stable this year. However, daily labour rates increased from March 2003 reaching a peak of 200 Af's per day in June. Rates then began decreasing in November. The same trends held for both rice and mutton. Rice reached a peak of 220 Af's per Kg from January, June and November 2003 and January 2004. Mutton prices reached a maximum price of 150 Af's in January, March and November 2003.

Mutton and rice increases directly impact village food security since these are staple food items. Households also purchase vegetable items (potatoes, spring onions, okra and carrots) from Aybak market: prices have remained steady. There are seasonal shortages of some vegetables, though this does not seem to impact vegetable prices nor is demand increased during off-season. Households simply purchase what is available at that time in the market.

69

DIETARY DIVERSITY - DIET QUALITY

Dietary diversity is a primary component of food security. Previous studies have shown that dietary habits in Afghanistan are not very diverse and consequently people are at risk of micronutrient deficiency disorders and related diseases. It is not entirely clear how dietary preferences and types of food available interact to determine household dietary patterns. In order to better understand the quality of diets in the last four months, surveyors asked about the frequency of eating foods from different food groups.



These results were used to create a dietary diversity score in order to capture dietary quality and monitor quality overtime. A score was calculated for each household and the results graphed in the chart on the right. The diversity score is calculated by attributing **a score of "1" to each food group that was eaten at least once weekly** by the household. Thus, households with a higher diversity score have a more diverse diet. Repeated surveys throughout the country indicate that most households consume cereals or food staple on a daily basis and thus cereals were not included in the diet diversity score. On average all households combined in Sarqia Afghania had a dietary diversity score of 2.9. The above histogram shows that no household scoring "0", where 7 households scoring "2" and 5 households scoring "3". Furthermore, two household scoring "5" and no one household have scored "6" and "7". Diversity scores are relatively or slightly different between Wealth groups. "Wealth" group score of file a month of 4.0 whereas "middle" score 3.5 and poor wealth group score 2.4. These results suggest that households either have no the means to buy more expensive foods or, do not acquired a preference for a more diverse diet. This could also mean that variety of food groups may not available from the nearest food market or produced locally.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households combined. The data shows that all households are eating protein rich foods (meat, milk) at least once per month to complement their cereals (wheat and barley). However this data does not reveal information on sufficiency of protein intake.

The choice of protein for households of this village differs by wealth group. Wealthy households eat meat twice a week whereas "middle" eat meat two to three times a month and "poor" eat meat once a month. Wealthy and middle group drink related milk product once month, whereas poor households did not drink milk for the last four month. "Wealthy" group eat pulses once a month, "middle" income households eat pulses two to three times a month and "poor" households eat pulses once a month. All household eat eggs at least twice a week.

In the last four months, both wealthy and middle households seem to be eating green vegetables at least two to three times a month, whereas other vegetables such as carrots, onion, okra and potatoes were eaten at least three to five times a week.

As data was not collected on quantities or actual consumption, it is not possible to make statements regarding consumption of vitamins and minerals. Areas of potential concern would be:
1) sufficiency of consumption of vitamin A from animal sources and beta-carotene from plant sources,
2) sufficiency of calcium consumption from milk related products and water (much of the water in the area is hard) considering the frequency of consumption and the limited amount available in other food items consumed, 3) sufficiency of vitamin C from fresh plant sources.

62

Average Frequency of Food Group Consumption by Wealth Group

Wealth Group	Meat	Milk, Yogurt, Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other Vegetables	Fruits
Wealthy	4.8	2.3	5.8	3.8	2.5	5.8	3.0
Middle	2.8	2.0	5.4	3.0	2.6	6.0	2.8
Poor	1.5	1.1	4.8	2.0	1.4	5.4	1.5
All Households	3.0	1.8	5.3	2.9	2.1	5.7	2.4

1 = Never Eat
2 = Once a month or less
3 = 2 to 3 times a month
4 = Once Weekly
5 = Twice Weekly
6 = 3 to 5 times Weekly
7 = Always

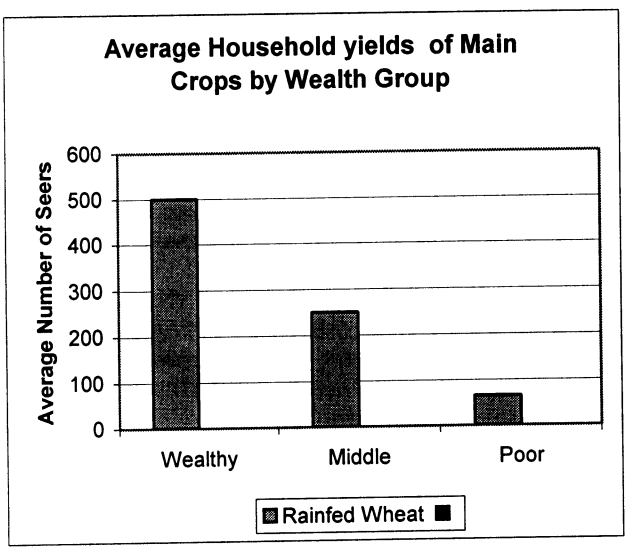
CROP PRODUCTION

Rural and semi-rural areas in Afghanistan are still highly dependent on subsistence agriculture for their own consumption, thus monitoring annual crop yields and amount planted can help predict the food security situation of households. Agricultural production is the most important source of income for the people of Sarqia Afghania, with 85% of the households deriving an income from crop production, agricultural labour provides employment to 75% of the households. Furthermore, crop production is the primary source of income for the households.

The main crops grown in Sarqia Afghania are rainfed wheat and barley. However, when the weather permits people grow melon and water melon. We have collected this data before the planting season and there is no previous data available in this area to compared amount of seeds that was planted.

2003 Harvest

The average wheat yield harvested by poor households in Sharqia Afghania in 2003 was 455 kg where the average harvested barley was 300 kg per household. The sources of both seeds were from previous year's harvest. There is no previous study done in this area and as result there is no previous data available to compare the harvest of the year.



The graph presents the average amount of yield kept by the household. It is disaggregated by wealth group in order to understand the relative differences in food availability by socio-economic group. The average wheat yield for poor household was 65 seers (or 455 kg) while, the average amount of wheat kept by the middle household was 250 seers (or 1750 kg) and with the wealthy households averaging 500 seers (or 3500 kg). However, this graph does not represent the food situation of the people.

FOOD SECURITY PERCEPTION

Household perception of food security is an important indicator of current food security status. No households consider the food situation worse than four months or year ago. Furthermore, 55% of households reported did not have enough to eat in the past four months. Of these (45%) households were from the "poor" wealth group and (10%) of households were from the "middle" income wealth group. Though none of the families interviewed felt that the food situation would be worse in the next 4 months. Nonetheless, 5% of households worried were their food was coming from. Many did express the view that they did not know how to think about such a matter. However, Household enumerators thought that 55% of the households did not have enough food to last through the winter. All of these households were from the "poor" wealth households.

PERCEPTION OF FOOD SECURITY INDICATORS	**Percentage** out of 40 households
Consider food situation to be **worse** than 4 months ago	0
Consider food situation to be **worse** in comparison to one year ago	0
Consider food situation **not** to be **enough** in the last four months	55
Worried where their food was coming from at the time of the survey	5
Think the food situation will be **worse** in the next 4 months	0
Enumerators thought households did **not** have **enough** food for the next 4 months	55

CONCLUSION: FOOD SECURITY

In Sarqia Afghania and surrounding villages of this area, sustainable food security requires rehabilitation strategy that leads to further sustainable food security, community participation and specific programs that improve the condition of living of the "poor" households. The programmes, therefore, should be a suitable for the different agro-ecological zones and community skills. Rebuilding and revitalization of agriculture and alternative livelihood sectors are the only subsets of the broad national view and it is the central issue of the sustainable food security of "poor" household in this area.
The priority is rapid revival of agriculture production to improve staple crop production in this area. The challenges or limiting factors are lack of water, availability of inputs (improved seeds, fertilizer and tools), rehabilitation of rural infrastructure and the services (pest and disease control, extension, credit).

Water is one of the most precious resources; the consequence of the successive and severe drought has been serious depletion of the water resources, particularly underground water. Priority action is better planning and management of water resources including river basins to ensure sustainability use of the rivers for irrigation and generation of power and crating of national water authority. The second most important challenge is to increase the quantity of quality seed production; to further develop the selection of improved varieties and to develop private enterprise-based national seed industry. A priority needs to be placed in developing rainfed seed verities that is suitable for dry land conditions. Wheat and Barley are the major crops growing in Sharqia Afghania or Hazrat Sultan district. However, legumes and maize play important roles in retaining food security in the area. It is strong believe that rotation of crop production can reduce overall risk of pests and diseases act as a buffer against low market prices, yield increase. Furthermore, it will also enhance dietary diversity which is a concern for the household's food security.

RISKS TO LIVES – Sarqia Afghania

The risk to lives section of this report highlights areas in the country where individuals are more at risk of dying and understanding the reasons behind this increased risk. It particularly focuses on better understanding the links between nutritional risk, food insecurity and mortality.

MORTALITY INDICATORS:
The survey found that the crude mortality rate (CMR) for Sariqia Afghania was 0.5 deaths /10000 people /day. This rate was not above both the emergency threshold rate of 1.0 deaths/ 10,000 people / day, and developing country level of 0.5 deaths /10 000 people / day. The children under five years of age mortality rate was 0.5 deaths /10000 people/ day. This rate was less than the stable developing country rate of 1.0 deaths/ 10,000 people / day. It was also less than the emergency threshold rate of 2 deaths/ 10000 people / day.
Because of the high rate of maternal and child mortality in Afghanistan, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. Of the number of children born in the last 4 months, the percentage of births attended by a skilled birth attendant is 45%. This figure, however, is not likely to include stillbirths or children who died during the last four months as a result of the difficulty of obtaining such information.

MORBIDITY INDICATORS:

The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under five years of age at 50% is *cause of high concern.* The presence of bloody diarrhoea in 12.5% of the children in the village indicates a more serious concern.

Many of the cases of diarrhoeal disease might be attributed to hygiene practices and a shortage of water. The percent of children under five suffering from Acute Respiratory Infections is 38%. Measles vaccination coverage in Afghanistan is 95%, and MOH figures for the Hazrat Sultan district report coverage was 89%. The measles vaccination coverage of 88% in this round of data coverage is consistent with other figures.

RISKS TO LIVES INDICATORS	**Percentage (%)**
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10, 000 / day)	0.5
Under 5 mortality in last 4 months (Deaths / 10, 000 / day)	0.5
Births in last 4 months attended by a Skilled Birth Attendant (n=8)	45
Morbidity Indicators	
Children < 5 years with watery diarrhoea (n=21)	50
Children < 5 years with bloody diarrhoea (n=21)	12.5
Children < 5 with ARI (n=45)	37.5
Children between 6 and 59 months with measles vaccination (n=21)	87.5
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate) (n=42) (n=26)	13.3
Children > 6 months and <59 months with Oedema (n=21)	13.3
Children > 6 and <59 months with severe acute malnutrition (n=21)	13.3
Children > 6 and <59 months with moderate acute malnutrition (n=21)	0
Children > 1 year and <59 months with a MUAC under 13.5 cm (n=21)	0
Children > 1 year and <59 months with a MUAC under 12 cm (n=21)	13.3
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm (n=23)	20.8
Reproductive age women (15-49 years) with a MUAC < 21.0 cm (n=23)	8.3
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt) (n=40)	0

CHILDREN NUTRITIONAL STATUS:

13.3% percent of children in the sample have global acute malnutrition, which includes children under five years of age with oedema and a weight-for-height measurement below 80 % of the median of a reference population. Children with oedema are at an extremely high risk of dying and in this sample, 13% children were severely malnourished (less than 70% weight -for -height percent of the median) or suffering from oedema. None of the children were found to be moderate malnourished

Children classified as moderately malnourished by MUAC measurements (<12.0 cm) are potentially at risk of mortality. About 13% of the children in the survey were reported to be moderately malnourished (less than 12.0 cm) and none of the children were reported to be at risk (<13.5cm) of being malnourished. These figures along with the weight-for-height percent of median results suggest that acute malnutrition for children in this age group was a cause of concern for the village.

ADULT WOMEN NUTRITIONAL STATUS:

Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. In Sariqia Afghania, 20.8% of women have a MUAC below 23.0 cm and 8% of women have a MUAC below 21.0 cm.

MICRONUTRIENT DEFICIENCIES:

The presence of iodised salt in the house is a proxy for the use of it and also therefore of iodine deficiency. No households had iodised salt as all salt was locally mined block salt during the survey. However, the iodised salt is available in the local market and there is a factory that produces iodised salt in Ghol mahalah, Shaberghan City.

HEALTH FACILITIES:

The table below lists the health services or facilities that are available to the people in Sarqia Afghania area. However, there are no health facilities in Sarqia Afghania itself and all the residents of the neighbouring villages travel to Aybak City (Provincial Capital City) to use Aybak City's health services. Aybak City has one main Hospital an NGO's comprehensive health centres and number of private doctors. People travel there with public transportation; the cost of getting to Aybak from Sarqia Afghania is 140 Afs. In an urgent situation, people hire taxi, the cost of which (round trip including a waiting period) is 500 Afs.

In Sarqia Afghania itself, there are a number of traditional birth attendants (TBA) to help the village women with birth deliveries. The birth attendant usually comes to the woman's house for services. The common custom

of TBA in this village and the surrounding areas is that there are no fixed charges for the TBA services and, as such, every household pays what they are able to afford and in accordance to their class in the community. The TBA fee ranges from 0 to 100 afs and can be in cash or kind. Many households in this village pay to their TBA services using food and no-food items.

All the Government health services in Aybak City are free of charge, and as a result they are used largely by low and middle income families. The wealthy class of Sarqia Afghania and the surrounding area goes to private doctors which charge 40Afs for a visit. Many people believe that the services of a private doctor are better than those of the government and if one is able to afford 40 Afs he/she should go to the private doctor. Medicine needs to be paid for in both cases. There are also skilled birth attendants in Aybak City hospitals and additionally there is a private service that people may use in the case of severe emergencies or complications. This type of private service is very expensive. Travel to Aybak is possible in all seasons, including winter,

Health Facilities Table

	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts	Aybak	Less than hour	500	Every body	Same
Basic Health Centre	Aybak	Less than hour	500	Every body	Same
Comprehensive Health Centre	Aybak	Less than hour	500	Everyone	Same
Hospital	Aybak	Less than hour	500	Every body	Same
Traditional healers/Birth Attendants	Sarqia Afghania	Less than five minutes	0	Women only	Same
Skilled birth attendant	Aybak	Less than hour	500	Everybody	Same
Private doctor	Aybak		500	Everyone	Same

The use of health facilities has stayed constant in the last four months.

WATER SOURCES:

The people of Sarqia Afghania obtain water for household use from a river, pool and spring. The primary source of drinking and household general consumption is Samangan River that runs through Aybak to Khulm. Men will spend between two to three hours fetching water from the river with donkeys. Households usually go down to the river twice a week. Households without male member rely on women and sons to get the water from the river on daily basis or from the nearby spring or pool. The local spring which is two to three hours away, are managed by village elders (Shura). Elderly shura members rotate on daily basis and oversee the amount of water taken for each household. The water quantity of river, pool and spring stay same as last year.

The number one priority for the village is to get more access to clean drinking water through the construction of more hand pumps or deep wells.

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
River	Two to three hours	Same	Same
pool	30 minutes	Same	Same
Spring	Two to three hours	Same	Same

SANITATION FACILITIES:

There are two common types of toilets in the Sarqia Afghania households. Open area and vault latrine. The majority of households use the open area as they can not afford to build vault latrine in their houses. The vault latrine is usually located in public places like schools and mosques and is always separate for men and women.

CONCLUSION: RISKS TO LIVES

The crude mortality rate is not above both the emergency threshold rate of deaths people per day and the normal developing country level of deaths per day. Furthermore, for children under 5 years of age, the mortality rate does compare favorably with the stable developing country rate and is less than the emergency threshold rate of deaths per day.

In Sharqia Afghania, water and sanitation were completely inadequate. Presumably, the rates of water diarrhea can be attributed to these two factors. This should be improved as rapidly as possible. Adequate preventative and curative health facilities and services should be available and accessible to the village community.

64

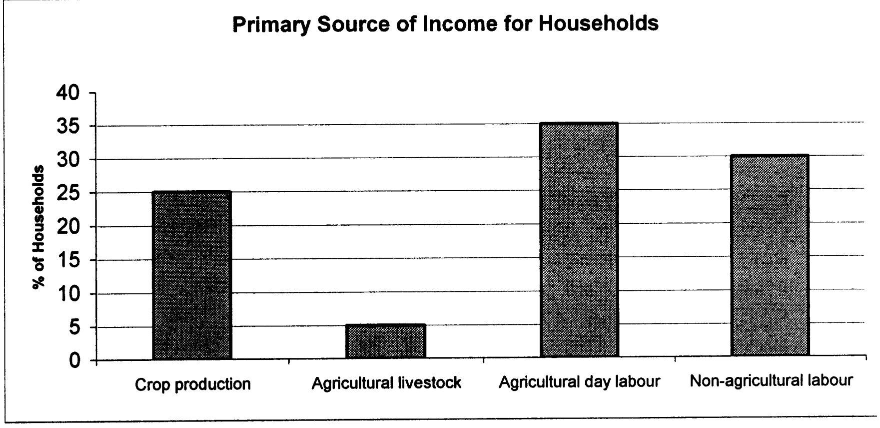
A mass measles vaccination campaign is also needed in this village. Measles vaccination coverage is poor and is probably not interrupting measles virus transmission. Moreover, community training in public health is essential as introducing the community to toilets and other sanitation programmes that will improve the condition of Sharqia Afgh'ania's health problem.

LIVELIHOOD SECURITY – SARQIA AFGHANIA

The Livelihood Security section is structured to give a general overview of the livelihood strategies of the community and the households within the community. It then looks at the main livelihood strategies of these households, describing the state of the livelihood assets related to each particular income source. This section also seeks to provide indicators of current shocks to livelihood sources and households' abilities to cope with these shocks. This information is also intended to provide agencies with sufficient information to decide whether there is a need to respond to a current shock. It finishes by looking at the characteristics of households that are at high risk of being impacted by future shocks and offering recommendations on how agencies can develop household livelihood opportunities, to mitigate against future shocks and protect against livelihood asset depletion.

LIVELIHOOD STRATEGIES:

The primary income source in Sarqia Afghania during the period of June to September 2003 was agricultural day labour, followed by non-agricultural day labour and crop production. Market labour demand and daily rates influence the income of Sarqia Afghania's "poor" and "middle" households considerably.



Of all Sarqia Afghania households, 35% stated non-agriculture day labour as their primary income sources. 41% of "poor" households and 20% of "middle" income households also reported it as an income source. Agriculture day labour was the second most important livelihood source for "middle" and "poor" households. Wealthier households gained some income from renting household assets.

The table below captures the percentage of households engaged in different activities. This provides an indication of the relative importance of different livelihood strategies to the community. Crop production is of primary importance as 85% of all households gained income from this activity. "Poor" households particularly depend on this activity (50%), while "middle" income households (20%) and "Wealthy" income households for the remaining 15%. Agricultural day labour provided income for 75% of households, while 65% engaged in Non-agriculture labour. Other important sources of income practiced on a smaller scale include: livestock, rental, remittances and collection and sale of natural resources, taking loan, gifts/gleaning.

65

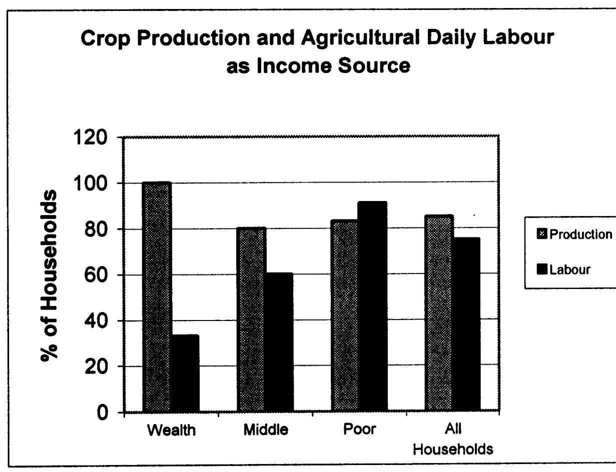
	Percent of households with Income Source	% of Households with Women's Income Source
Spinning/ Carpets Labour	--	15.0
Trade / Shops	--	--
Spinning/ Carpets Business	--	5.0
Agricultural Labour	75	--
Agricultural Livestock	25	15
Take a Loan	30	--
Microbusiness	--	--
Agricultural Crops	80	--
Collection–natural resources	25	5.0
Formal Wage Labour	0.0	--
Informal Wage Labour	0.0	--
Remittances	5.0	--
Rental Income	5.0	--
Gifts/Gleaning	10	--
Repayment of Loan	--	--
Begging	--	--

Data regarding women's income generation can clarify the role of woman in current livelihood strategies and identify potential for future involvement. Only (15%) women made carpets for wage, followed collection of natural resources and carpet business.

Carpet labour was the greatest female contribution to household income for women of poor and middle wealth categories. In "poor" and "meddle" income households carpet weaving accounted for 15% of income generation activity. No "wealthy" household women was engage for carpet wage or business. Both trade and collection of natural resources were important income sources for the "poor" women households. Furthermore, activities most important to men tended to less important to women. However, all women received income from gifts, which men of all wealth groups did not consider an income source.

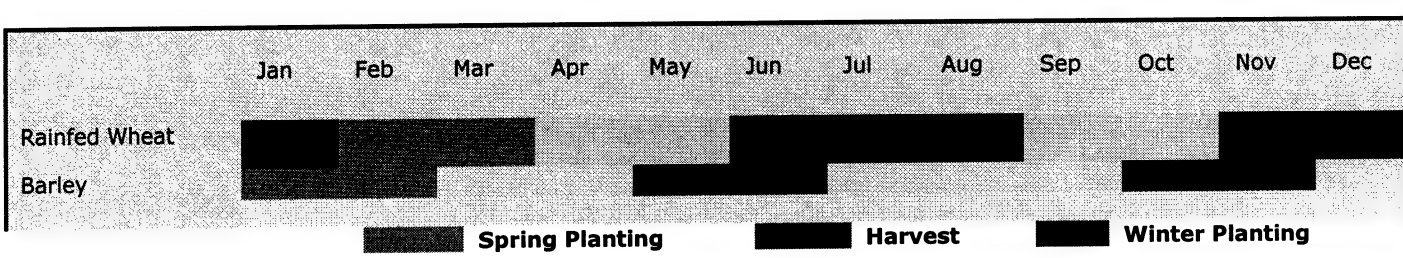
CROP PRODUCTION AND AGRICULTURAL DAILY LABOUR

Crop production, agriculture labour, non-agricultural day labour and collection of natural resources remain important sources of income for the majority of the Sarqia Afghania residents. The graph on the right demonstrates the percent of households all wealth groups for both crop production and agricultural day labour.



All households were engaged in rainfed crop production. However, "wealthy" and "middle" income households tended to be oriented toward crop production rather than labour, whilst " poor" households tended to be engaged relatively in labour rather than crop production. This can be explained by the input costs, land requirements, and water accessibility needed for crop production. "poor" households are generally less able to access these factors.

The main crops grown in Sarqia Afghania are wheat and barley. The table below shows the crop calendar for rainfed wheat and barley in the area. Wheat is harvested during the months of June and July. Barley is harvested during the months of May and June. Wheat and barley are planted only in the winter.



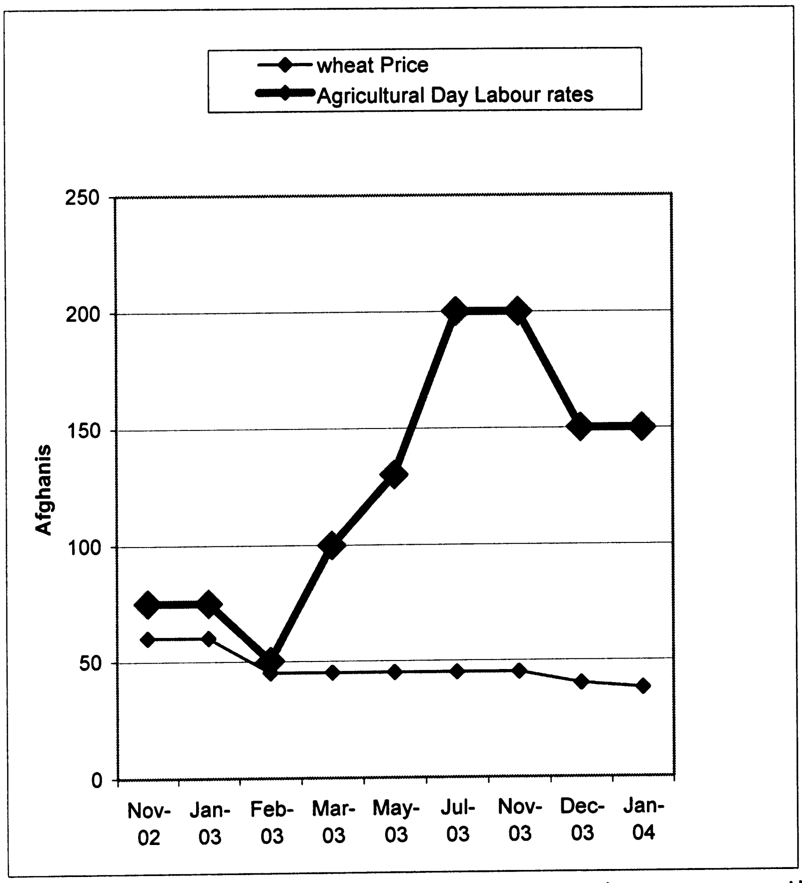
Crop Production Assets: Land Ownership and Draft Oxen

In Sarqia Afghania, 85% of households own rainfed land with an average landholding of 62 Jeribs. The average amount of land own differs according to wealth. On average "wealthy" households own 155 Jeribs, "middle" income households, 35 Jeribs and the "poor", 22 Jeribs. Thus, land ownership is a primary indicator for wealth differentiation in many parts of Afghanistan. Though draft oxen are extremely important to household crop production, in Sarqia Afghania, none of the interview households owned oxen.

	All Households	Wealth	Medium	Poor
Households owning land (%)	85	100	80	83
Average amount of land owned (jeribs)	62	155	35	22
Households owning rainfed land (%)	85	100	80	83
Households owning one or more draft oxen (%)	0	0	0	0

Shocks to Agricultural Yields

In Sarqia Afghania, 13 households reported 20 to 50% crop losses and eight households had more than 50% crop losses by smuts (seed borne) diseases and leaf, stem born diseases such as rust. The leaf and stem borne diseases normally reduce yields by decreasing the photosynthetic area of the plant.



Market Prices of Agricultural Goods

In Aybak city market, wheat prices remained constant from February 2003 to January 2004. The current price of around 38 Afghanis per seer (7 kg) is slightly lower than January prices.

As the graph on the left demonstrates, agriculture day labour rates are highest during the harvest, compared to planting time (November to January).

During 2003 planting season, the daily labour wage was 75 Af's, though 2004 rates during planting have since doubled (150 Af's).

Daily labour increased from March 2003, reaching a high of 200 Af's per day from July to November 2003. This period corresponds with spring planting season and the harvest of winter crops. Should wheat prices remain depressed while agriculture labour rates are inflated, input cost will rise so that farmers are forced to stop growing wheat.

LIVESTOCK

Livestock ownership is a primary source of income for 5% of households in Sarqia Afghania and 25% of households report some income generation related to livestock. Besides selling the livestock and household consumption, post gaaw (cow skin), post buz(goat skin) and qaraqal (sheep) skins can be sold.

	Goats	Sheep	Cows	Donkeys
Average Number Owned – Wealth	2.0	10.0	1.5	1.3
Average Number Owned – Middle	14.5	25.0	0	2.0
Average Number Owned – Poor	0.0	0.0	1.7	1.1
All households	10.3	17.5	1.6	1.4

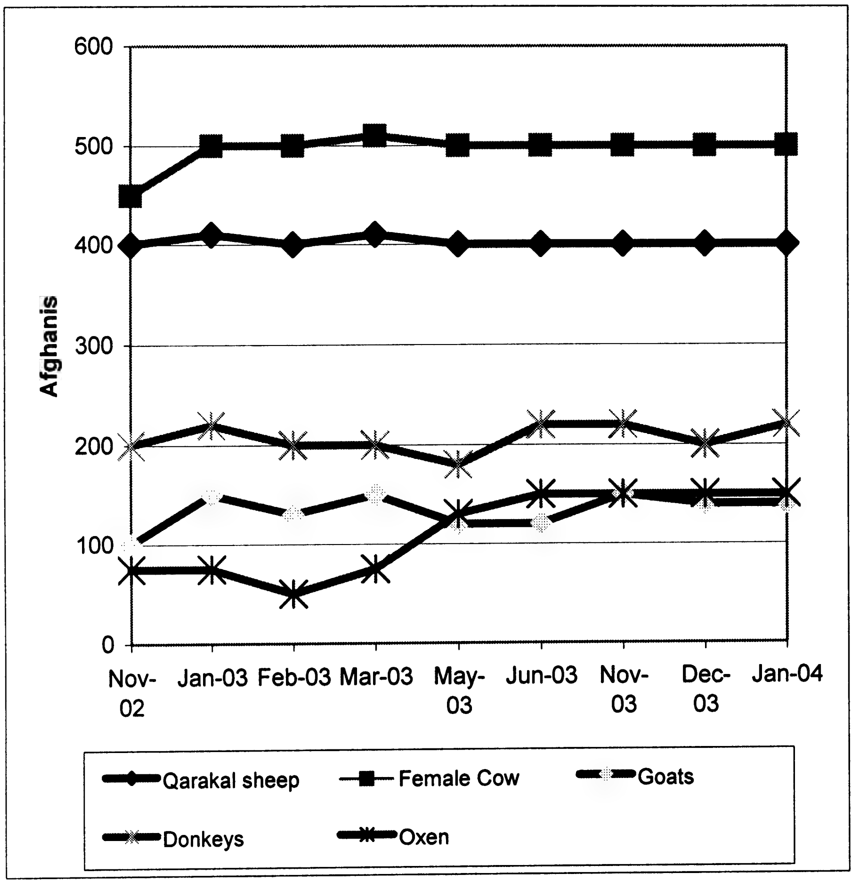
The number of animals owned by a household often indicates status within the community. Wealthier households own more animals compared to "middle" and "poor" income households. All "wealthy" households owned Donkeys (100%). This animal is particularly important as long distance transport, water fetching and traveling to the market. In comparison, only 67% of the "poor" owned Donkey compared to 100% of "middle" income households.

Livestock disease

When asked about prevalence of livestock diseases, the male village leaders noted that their sheep and goats were affected by Sheep Pox and their cattle had foot and mouth disease. There are a total of 340 sheep and goats owned by the people of Sarqia Afghania, with 140 reported affected by PPR Sheep Pox a highly contagious disease. This represents a high disease incidence that merits external support.

67

The cattle owned in the village of Sarqia Afghania were 25 cows. The data shows that all cattle owned by the village are affected by foot and mouth disease. Since, both of these diseases are deadly, households should have offered evidence that some of their herd had died recently, but this was not the case. Therefore, it is unlikely that Sheep Pox is as prevalent as village leaders noted. Additionally, it is unlikely that all cattle and oxen suffered from foot and mouth, though the disease has some presence in the area as it has been a problem in the past. Livestock owners in Sarqia Afghania and surrounding areas have not yet had their animals vaccinated and thus their livestock are at risk of suffering from disease outbreaks.



Livestock Prices
Sarqia Afghania and surrounding villages rely on the Aybak city markets livestock sales and purchase.

As seen on the left, both qaraqal sheep and cow prices remained stable from November 2002 until January 2004. However, oxen prices increased between February and January 2004. Goat prices were stable at approximately $150, with seasonal variation.

Donkeys are considered the second most important animal to own, and prices tended to remain stable around $220, though some seasonal variation existed.

Grazing land and Access to Water
According to village leaders, access to grazing land has increased in the four months prior to the survey. Grassland productivity has been similar to previous years, whilst access to water increased. However, water shortages between 1999 and 2002 did play a role in subsequent animal losses. Unfortunately, local authorities were not able to use changes in grassland and water access to predict future threats to livestock. Increased awareness of threats to grazing land access might have allowed communities to protect themselves better against drought related animal losses. In addition, common grazing land is sometimes compromised by illegal plantations of rainfed wheat. This practice can also compromises community animal stocks.

EMBROIDERY, CARPETS, GILIMS, WOOL and SILK SPINNING:

Carpet making was not an important source of income for Sarqia Afghania households. However, 15% of women households claimed source of income. According to the women, carpet weaving is engaged for both income generation and household consumption. In "poor" and "meddle" income households carpet weaving accounted for 15% of income generation activity. Carpet weaving for wages did not usually occur in a separate weaving unit; instead, participants were given material by an investor who paid a set rate dependent on the difficulty of the pattern and the length of carpet completed.

Furthermore, no changes in market prices or wool/silk availability were noted and input costs remained the same. However, both men and women observed that households engaged in these activities spent more time weaving.

COLLECTION AND SALE OF NATURAL RESOURCES

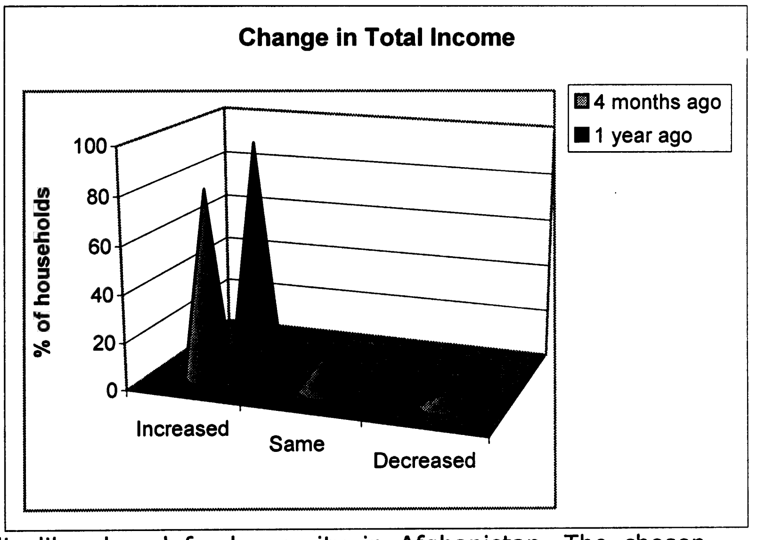
Five households were involved in the collection and sale of natural resources. Two households were from "middle" and three were from "poor" income households. All these households collected and sold bushes and animal manure. Both livelihood activities were negatively impacted by a recent drought. Lack of rain meant bushes could not grow as well and fewer animals (reduced dung available for collection). The village did not feel

the future of these resources would be compromised since the animal stocks would be replenish and bushed are cut above the root areas so they will grow back after the rains.

Non-Agricultural Labour (skilled and unskilled manual labour)
In Sarqia Afghania, 65% of households claimed it manual labour as an income source. Most (8) households ware from "poor" households, followed by "middle" income households (3) and "wealthy" (2) households.

OTHER INCOME SOURCES
The only other main income source the "poor" households in Sarqia Afghania was loans. Loans were a major source of income for 30% of the "poor" households.

CAPACITY TO COPE: COPING STRATEGIES
As seen graph on the right, 15% of all households reported stable income over recent month, while 80% of households reported and income increase and (5%) of houses experienced a drop in income). This contrasts with last year's trend where most households (90%) reported increased income compared to only 80% in the last four months. There is slight instability in income rates compare to last year and it suggests livelihood insecurity. However, decreased income rates were not associated with common activities, thus these trends might be attributed to normal variation rather than a specific shock.



The household coping strategies included here were not meant to include all possible options a home might exercise to survive tough times. The activities chosen were meant to reflect easily measured behaviours that might predict declining livelihood and food security in Afghanistan. The chosen behaviours were sub-divided into erosive and non-erosive coping strategies to better understand the effect of household coping behaviours on future livelihood security. The division of behaviours cannot be considered mutually exclusive as some non-erosive behaviour (selling motorcycle, bicycle etc.) might affect future opportunities. Similarly, the list does not reflect a continuum of behaviour, but general indicators of a worsening situation. However, some households experiencing chronic or transitory poverty may also periodically use these strategies.

Non-Erosive Coping Strategies (last four months) (n=20)	Percentage
Household member migrated for labour	15
Household members worked more hours to make daily expenses	30
Households who borrowed food from relatives to make a meal	60
Sold Carpet / Gilims from the house	10
Consumption of dried bread	5
Erosive Coping Strategies (n=20)	
Household took out loan	30
Households who took food on credit from local shop	80

Non-erosive coping strategies
In order to meet expenses, 10% of households sold non-productive assets such as carpets/gilims. These sales are often linked to preparation for the winter season. Other common strategies include working longer hours (30%) and household member migrated for labour (15). Food sources and consumption patterns are also key indicators of vulnerability. Of the families interviewed, 5% consumed dried bread, a clear indication of food insecurity. Other than food consumption changes, most families needed external support to find sufficient food. Most households (60%) were forced to borrow food from relatives to make a meal in the last four months.

Erosive and distress coping strategies
It is apparent that strategies adapted by households to deal with shocks varied with individuals, households and villages. In Sarqia Afghania, 30% of households took loans as a coping strategy to meet daily expenses. All households were from the "poor' income households. Many households (80%) required credit from local shops in order to obtain sufficient food. It is apparent that both "poor" and "middle" households are extremely vulnerable as they jeopardize future production capacity to cover immediate needs.

69

Income Diversity and Capacity to Cope – Risk to Livelihoods

	Average Income Diversity Score
Wealth	3.3
Middle	3.0
Poor	3.4
All households	3.3

Capacity to cope is defined as the capacity of households to absorb shocks and to adapt to stresses induced by climate, price instability, unemployment and complex emergencies such as political crisis. However, households with various income sources are better able to cope than households who rely on only one or two income sources. The income diversity score is simply a count of the number of income sources for each household. In Sarqia Afghania, households have an average income diversity score of 3.3. In many cases the wealthier household often score higher income diversity measures, however, in this situation all household wealth groupings have a similar score. The main sources of income in Sarqia Afghania were crop production, agricultural day labour, non-agricultural labour, livestock, loans collection and sell of natural resources.

CONCLUSION - LIVELIHOOD SECURITY SUPPORT

The survey shows that the livelihood strategies adapted by the households varied with individuals and households across the three wealth groups in Sharqia Afghania. It is also noted that there was no one alternative coping strategy for a particular problems, but bundle of options. These options were not homogenous either across wealth groups. In order to meet expenses, of households sold non-productive assets such as carpets/gilims, whereas, other common strategies include working longer hours and household member migrated for labour. Of the families interviewed, 5% consumed dried bread, a clear indication of food insecurity. Other than food consumption changes, most families needed external support to find sufficient food. Most households (60%) were forced to borrow food from relatives to make a meal in the last four months and a long same line 80% of poor households were forced to borrow food from the local shops.

The priority support to improve the livelihood security of this sentinel site is rapid revival of the crop production by ensuring the following:

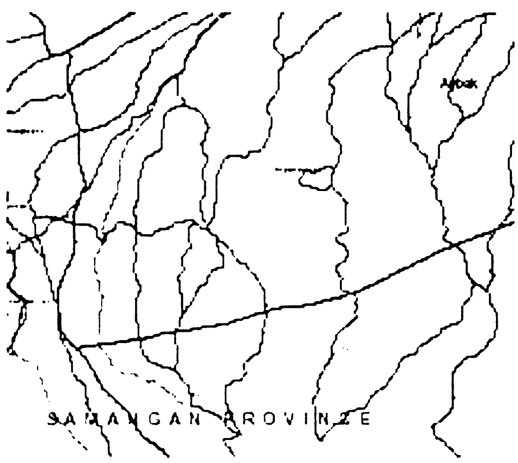
- Supporting programs with a wide range of development objectives. For example, investments in soil, animal vaccination campaign against major diseases, agricultural training, providing tools and inputs and water conservation efforts supported by cash for work or food for work programs will have potential long-term implications for increasing agricultural productivity and crop income of this sentinel site. This will lead to enhance labour productivity and higher wage earnings.
- Improved health and nutrition achieved through food-assisted maternal and child health programs or at improved water and sanitation again will have immediate implications for individual health and well-being and promote productivity and income-earning potential over the long term.

Samangan Surveillance Unit	**National Surveillance System (NSS)** Transitional Islamic State of Afghanistan Ministry of Rural Rehabilitation & Development, Ministry of Agriculture & Animal Husbandry & Ministry of Health	**Hazrat Sultan District** • Nawadbad Qaracha Bolaq **Fall 2003**

SUMMARY FINDINGS FOR NAWADBAD QARACHABOLAQ SENTINEL SITE IN EASTHERN HAZRAT SULTAN DISTRICTS (These findings are based on field survey of 20 households and Nawadbad qaracha bolaq village leaders interview. These findings should not be assumed to representative of other parts of Afghanistan)

AIMS

Afghanistan Samangan Province



Contents of Bulletin **Page**

The report is organized so that for each sentinel site in Kohistan, key indicators representing the main components of each of these three categories are presented and discussed in a narrative format

Food Security

- No household considered the food situation worse than four months ago or one year ago. However, 60% of households did not have enough to eat in the past four months. Though none of the families interviewed felt that the food situation would be worse in the next 4 months. Nonetheless, 5% of households worried were their food was coming from. Many did express the view that they did not know how to think about such a matter. However, enumerators thought that 70% of the households did not have enough food to last through the winter. Dietary Diversity is a concern of "poor" income households in the village.

Risk to Lives

- The crude mortality rate is not above the emergency threshold rate (1 deaths/10000 people per day) and the normal developing country level (0.5 deaths /10000 people per day). Furthermore, for children under five years of age, the mortality rate (0.5 deaths/10000 people per day) does compare favourably with the stable developing country rate (1.0 deaths/10000 people per day) and is less than the emergency threshold rate (2 deaths/10000 people per day).
- Morbidity patterns of children under five years of age were high (ARI: 33%, watery diarrhoea 20% and bloody diarrhoea 27%)

Livelihood Security

- In order to meet expenses, common livelihood strategies in Nawbad Qaracha Bolaq include the sale of non-productive household assets, working longer hours, household member migrated for labour and sons sent to work as indentured labour. Of the families interviewed, 25% consumed dried bread, a clear indication of food insecurity. Most families needed external support to find sufficient food. Most households (60%) were forced to borrow food from relatives to make a meal in the last four months.

What is the NSS?
The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs.

Methodology

The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the communities with respect to agro-ecological features, economic activities, available services and people in a given area (livelihood / agro-ecological zone). Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel may not be representative of every village in the zone. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same zone (See Annex I for detailed information on methodology).

OBJECTIVES OF REPORT

- Provide current information on household food security status in Hazrat Sultan District
- Provide information on risk to lives and nutritional risk of individuals in Hazrat Sultan District
- Provide information on the current household livelihood security situation in Hazrat Sultan District, specifically looking at current shocks to livelihoods and the ability of households to adapt to (cope with) these shocks
- Develop a better understanding of the vulnerability and risk of communities and households in Hazrat Sultan District in relation to issues of food security, mortality, health and nutrition.

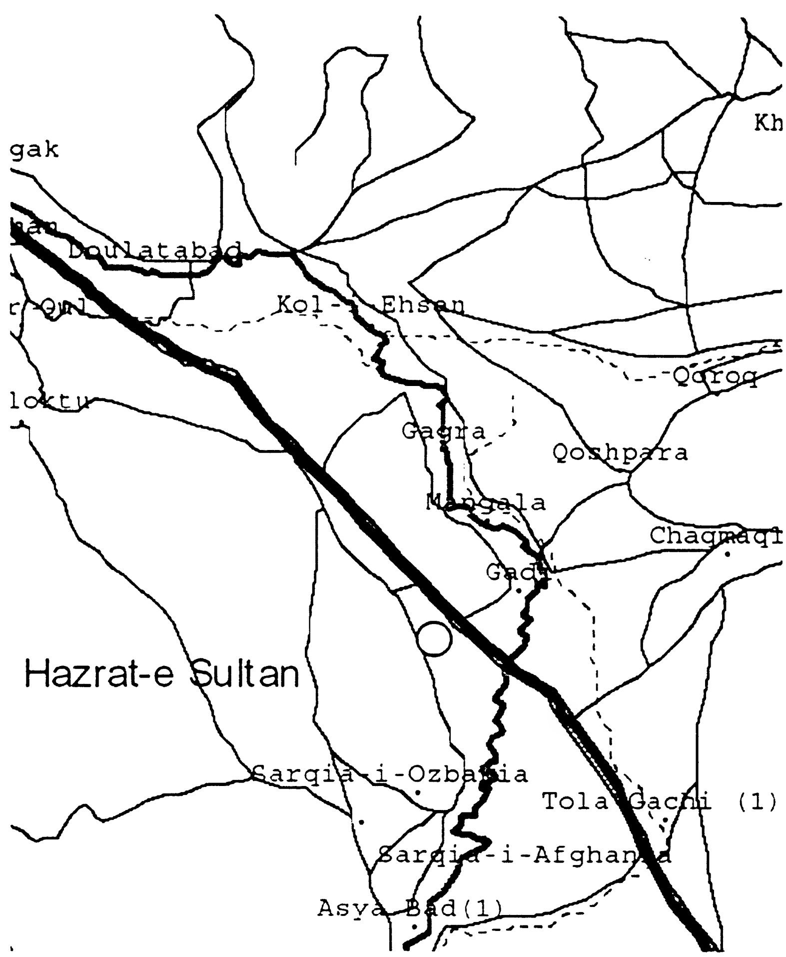
Additionally, this report provides baseline information on indicators that are unique to a local area and have not yet been explored in the depth needed for use in guiding programmes and policies. They are:

- Characteristics of household wealth in Hazrat Sultan District
- Livelihood Strategies employed in Hazrat Sultan District
- Presence of morbidity, mortality and malnutrition in rural communities in Hazrat Sultan District

And finally, the report aims to provide information on how government and other agencies can use this increased understanding of livelihoods, vulnerability and risk in order to design and prioritise effective policies and programme interventions.

LIVELIHOOD ZONES FOR HAZRAT SULTAN DISTRICT

Livelihood zones in Hazrat Sultan District can be divided into three distinct agro-ecological areas. These distinctions impact household livelihood patterns. Sentinel site was selected from each area. Most of the province consists of mountainous, rainfed farmland and irrigated valleys. However, this report will focus the three agro-ecological zones of Hazrat Sultan. This report includes information on each sentinel site from each Zone.



Zone 1: Rainfed Land (39 villages): Chochman: This Zone covers South west of Hazrat Sultan. Livestock and rainfed wheat and barley are the main source of agriculture production. The surrounding villages share similar livelihood.

Zone 2: Grazing Land, Irrigated and rainfed land (65 villages): Sarqia Afghania Zone two covers the South of Hazrat Sultan. Sarqia Afghania and the surrounding communities share similar livelihoods and are located in river/canal-irrigated downstream valleys. The source of water is river that runs though KHuram Wa Sarbagh to Sarqia Afghania. The river water is used for both irrigation and household consumption. Livestock, wheat and barley crops are the main source of income for these villages, but they also have intensively irrigated small-scale horticulture production during the summer.

Zone 3: Mixed Mountainous and down stream valleys (16 villages): Nawabad Qaracha Bolaq: Zone three covers the South Eastern section of Hazrat Sultan. The area called Qoroq (fertile soil and high water table leval). A large number of springs feed into irrigation systems, allowing for small plots of intensive agriculture. Beside, the wheat and barley crops the area are a famous producing sweet melon, water melon and squash.

GENERAL Nawabad Qaracha Bolaq INFORMATION

Nawabad Qaracha Bolaq is the village that represents Livelihood Zone two in this report. It is the sentinel site chosen to represent the 16 villages of the South east of Hazrat sultan centre and is located at an altitude of 1500 meters.

	Average Household Size
Wealth	**7.3**
Middle	**6.3**
Poor	**6.0**
All Households	**6.3**

The majority of Nawabad Qaracs Bolaq settlement identify themselves as Uzbek and speak Uzbek language. The village currently has five mosque and 350 households. Of these households 53% are male and 46% are female. Household sizes differ with wealth; wealthy households tend to have more family members compared to middle and poor households. For most likely poor households tend to split into nuclear households when members of the households get married. Furthermore, wealthy men can afford to marry more than one wife.

The Qaruadar (village leader) Mullah Abdul Khaliq Bai, has been chosen by the people of this village as a village leader. The leader of the village with the *shura*(village elders) group make all the decisions and make facilities for the community. Usually, all disputes within the village are settled by a group of village elders. They have administrative links to the Hazrat Sultan district, which is 3 hours away by donkey or foot. The district governor is responsible for his district to the provincial centre, at this point, Aybak.

Wealthy Households: 15 percent (3 households)

Households have more than 60 livestock and more agriculture land for crop production.

--women--

These households have between 50-60 sheep, cows and having rainfed land(50-100 jiribs), have a house.

--men--

Middle Households: 20 percent (4 households)

These households have only one house. They have a house and limited number of livestock (20 – 30).

--women--

Limited number of livestock (25-30) These households have land (25 jiribs), but some often engage in casual labour.

--men--

Poor Households: 65 percent (13 households)

Household with limited assets. Households who are casual labour and have no access to land.

--women--

Households who have no assets. Households with limited livestock and doing casual labour. However, these households often have one donkey, house and number of dependent.

--men--

The community categorized households into three different wealth groups, or socio-economic categories. The table on the right describes the type of features characterizing each wealth group and the percent of households falling in each category.

These socio-economic groups will be used throughout the report to understand how food security, livelihood security and risk to lives may be different for households of different socio-economic status. There is a large difference in the household size between the wealthy and the other two groups that the enumerators attribute to a few different reasons.

It is seen that the rich men have more than one wife at a time and so bear children from both wives and that the sons of rich families do not separate from the family after marriage. In addition, members of poorer families may migrate to find work and so contribute to a smaller family.

In Nawabad Qaracha Bolaq village has only one primary school for boys (1 to 6th grade). The school is relatively within a short distance and the students are able to walk. School has four classes and each class has between 40 and 50 students.

73

Most of households have a high number of dependents, particularly children and economically active unemployed immediate relatives. However, the average household size and dependency ratio is higher in Nawabad Qaracha Bolaq than the rest of the district.

Further more, social networks are essential for livelihood strategies. Women play a major role in reproductive and household's affairs. Children often help women with accomplishing some of their responsibilities. Men have more authority than women. Some men are engaged in wage employment. It is the men who have control over the large agricultural activities and who are involved in local community politics at ethnic or tribal authority level.

Gender was found to be critical in the household structure and processes that relate to rural livelihood security. The data shows unequal gender relations at household level. To a large extent, household headship determines the access of the household to assets and resources, division of labour, decision-making, power and livelihood strategies.

Female-headed households tend to diversify their activities to earn income in cash and in kind. Gender was identified as an important factor in using indigenous knowledge in enhancing livelihood security. Both men and women were found to possess indigenous knowledge. Women's indigenous knowledge is essential for ensuring household food security, maternal health and child care and income generation though weaving fiber clothes, production of carpets, and handicraft. Their knowledge is not limited in food production and post harvest processes. Men utilize their indigenous knowledge in agricultural production, carving and traditional medicines.

Assets and Activities	**Wealth Group**		
	Wealthy (15%)	**Middle (20%)**	**Poor (65%)**
Male Group perception			
Land	50 -100 Jeribs	10-25 Jeribs	5-10
Sheep/goats	50-60	25-30	None - 1
House	1-2 rooms	1 room	1 room
Donkey	1-2	1	1-2
Water	Collect with donkey	Collect with donkey	Collect with donkey
Carpet	1-3	1-2	0-1
Gillim	2	1	1-2
Travel	Mazar or Aybak Market	None	None
Employment	People work for them	Does own work	Works for othe
Remittances	None	Yes	None
Zaqat	Gives Zaqat to the poor households	None	Receives Zaqat
Female Group perception			
Land	50-100 Jeribs	25-50 Jeribs	0-10 Jeribs
Sheep/goats	50-60	20-30	None
House	3 rooms	1 room	1 room
Donkey	3	1	0
Carpet	4-5	1	0
Iranian carpet	1	0	0
Gilim	4-5	2	1
Travel	Aybak	None	None
Employment	People work for her	Does her own work	Works for othe
Remittances	None	Yes	None
Zaqat	Gives Zaqat to Mullah	None	Receives Zaqa
Clothes	Has several dresses	Has some dresses	Has less dress
Jewelery	Has many coins, a watch and bracelets	Has some coins (not silver)	Has none or tv

74

MARKET ACCESS

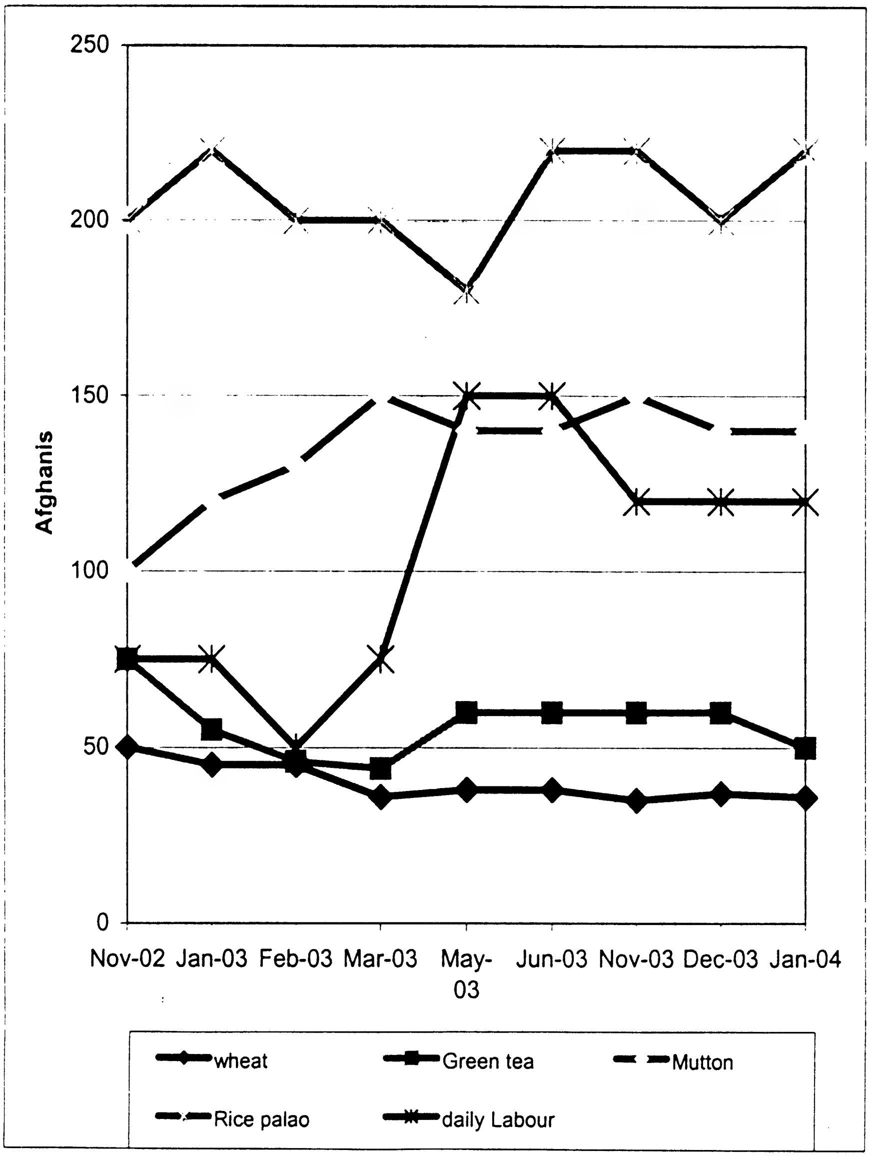
Aybak bazaar market is the main closest food market to Nawabad Qaracha Boloq village and the sorounding villages.

Location of Market	Time taken to reach market		Cost of getting to market	Market Accessible in winter and Spring
	Vehicle	Foot		
Aybak centre	1 hours	Half day	60	Yes
Hazrat Sultan bizaar				Yes

The roads are present and relatively good. The Nawabad Qaracha Bolaq residence can get some of the basic food items from the Hazrat Sultan bazaar. However, most of the households travel to Aybak for a lot of food and none food items. Medicine drugs are always needed to travel to Aybak city and people prefer to do their shopping in Aybak city than the small bazaar in Hazrat Sultan.

Most households send one household member to the market on a market day (Mondays and Thursdays, weekly) during, summer, spring and autumn. Both markets are accessible all season or year round.

The people from Nawabad Qaracha Bolaq go to the market to trade wheat and livestock and to buy both food and non-food items. Transactions in the market take place using cash. However, both market bazaars people can trade non cooked food items such as agriculture crops to other items that they want to buy.



MARKET PRICES

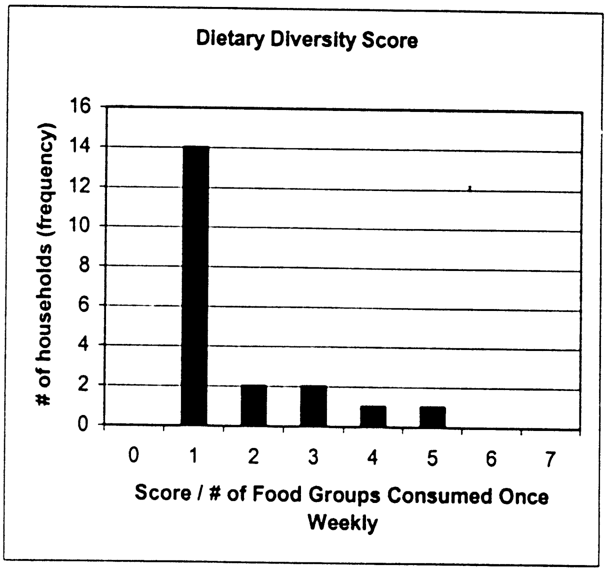
Nawbad Qaracha Bolaq household rely on Aybak market for food and non-food items, 70% of households purchase wheat. Wheat prices have been stable over the past year and impact daily labour rates since many workers are paid wheat for work. When prices decrease, whilst labour rates increase, it becomes more profitable to work for wheat compared to growing own crop. As shown on the graph to the left, wheat and green tea prices have been stable this year. However, daily labour rates increased from March 2003 reaching a peak of 200 Af's per day in June. Rates then began decreasing on November. The same trends held for both rice and mutton. Rice reached a peak of 220 Af's per Kg from January, June and November 2003 and January 2004. Mutton prices reached a maximum price of 150 Af's in January, March and November 2003.

Mutton and rice increases directly impact village food security since these are staple food items. Households also purchase vegetable items (potatoes, spring onions, okra and carrots) from Aybak market: prices have remained steady. There are seasonal shortages of some vegetables, though this does not seem to impact vegetable prices nor is demand increased during off-season. Households simply purchase what is available at that time in the market.

75

DIETARY DIVERSITY - DIET QUALITY

Dietary diversity is a primary component of food security. Previous studies have shown that dietary habits in Afghanistan are not very diverse and consequently people are at risk of micronutrient deficiency disorders and related diseases. It is not entirely clear how dietary preferences and types of food available interact to determine household dietary patterns. In order to better understand the quality of diets in the last four months, surveyors asked about the frequency of eating foods from different food groups.



These results were used to create a dietary diversity score in order to capture dietary quality and monitor quality overtime. A score was calculated for each household and the results graphed in the chart on the right. The diversity score is calculated by attributing **a score of "1" to each food group that was eaten at least once weekly** by the household. Thus, households with a higher diversity score have a more diverse diet. Repeated surveys throughout the country indicate that most households consume cereals or food staple on a daily basis and thus cereals were not included in the diet diversity score. On average all households combined in *Nawabad Qaracha Bolaq* had a dietary diversity score of 1.7. The above histogram shows that no household scoring "0", where 14 households scoring "1" and 2 households scoring "2" and "3". Furthermore, one household scoring "4" and "5". None of the households scored "6" and "7". Diversity scores are relatively or slightly different between Wealth groups. "Wealth" group score 3.2 whereas "middle" score 1.8 and poor wealth group score 1.4. These results suggest that "wealthy" households either have the means to buy more expensive foods or, acquired a preference for a more diverse diet.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households combined. The data shows that all households are eating protein rich foods (meat, eggs, pulse and milk) at least once month to complement their cereals (wheat and barley). However this data does not reveal information on sufficiency of protein intake.

The choice of protein for households of this village differs by wealth group. "Wealthy" households eat meat twice a week whereas "middle" household eat meat two to three times a month and "poor" household eat meat once a month or less. "Wealthy" groups drink related milk product once week, whereas "middle" and "poor" households drink milk once a month or less. No household reported eating pulses for the last four months. "Wealthy" households eat eggs once a week, where "middle" income households eat eggs two to three times a month and no "poor" households reported to eat eggs for the past four months.

In the last four months, no household of all wealth groups eat green leafy vegetable. However, other vegetables such as carrots, onion, okra and potatoes were eaten at least once a week or more.

As data was not collected on quantities or actual consumption, it is not possible to make statements regarding consumption of vitamins and minerals. Areas of potential concern would be: 1) sufficiency of consumption of vitamin A from animal sources and beta-carotene from plant sources, 2) sufficiency of calcium consumption from milk related products and water (much of the water in the area is hard) considering the frequency of consumption and the limited amount available in other food items consumed, 3) sufficiency of vitamin C from fresh plant sources.

Average Frequency of Food Group Consumption by Wealth Group

Wealth Group	Meat	Milk, Yogurt, Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other Vegetables	Fruits
Wealthy	5.0	5.0	4.0	1.0	1.0	4.0	4.7
Middle	3.0	1.5	2.0	1.0	1.0	6.0	1.3
Poor	1.4	1.5	1.0	1.0	1.0	5.4	1.2
All Households	3.1	2.6	2.1	1.0	1.0	5.3	1.7

1 = Never Eat
2 = Once a month or less
3 = 2 to 3 times a month
4 = Once Weekly
5 = Twice Weekly
6 = 3 to 5 times Weekly
7 = Always

X6

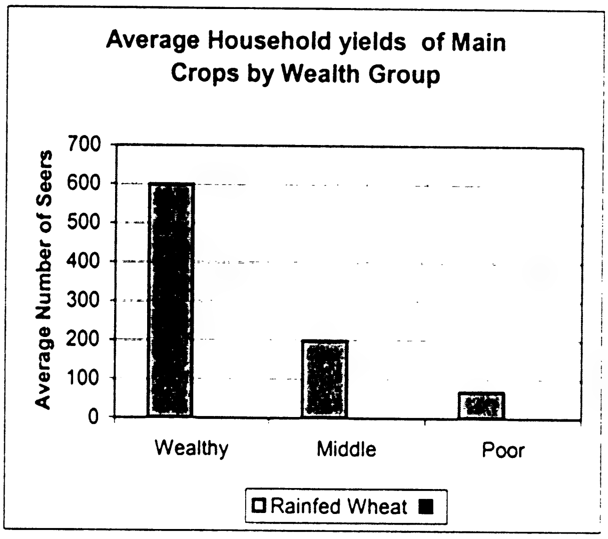
CROP PRODUCTION

Rural and semi-rural areas in Afghanistan are still highly dependent on subsistence agriculture for their own consumption, thus monitoring annual crop yields and amount planted can help predict the food security situation of households. Agricultural production is the most important source of income for the people of Nawabad Qaracha Bolaq, with 55% of the households deriving an income from crop production, agricultural labour provides employment to 65% of the households. Furthermore, crop production is the primary source of income for (15%) of households.

The main crops grown in Nawabad Qaracha Bolaq are rainfed wheat and barley. However, when the weather permits people grow melon and water melon. We have collected this data before the planting season and there is no previous data available in this area to compare amount of seeds that was planted.

2003 Harvest

The average wheat yield harvested by poor household in 2003 was 490 kg, where the average harvested barley yield was 213 kg per household. The sources of both seeds were from previous year harvest. There is no previous study done in this area and as a result there is no previous data available to compare the harvest of the year.



The graph presents the average amount of yield retained by the household. It is disaggregated by wealth group in order to understand the relative differences in food availability by socio-economic group. The average wheat yield kept by poor household was 70 seers, where average amount of wheat kept by the middle households was 200 seers or 1,400 kg, with wealth households averaging 4,200 kg or 600 seers. However, this graph does not represent the food situation of the people.

FOOD SECURITY PERCEPTION

Household perception of food security is an important indicator of current food security status. No households consider the food situation worse than four months or year ago. Furthermore, 60% of households reported they did not have enough to eat in the past four months. These households were from the "poor" wealth group.

Though none of the families interviewed felt that the food situation would be worse in the next 4 months. Nonetheless, 5% of households worried were their food was coming from. Many did express the view that they did not know how to think about such a matter. However, Household enumerators thought that 70% of the households did not have enough food to last through the winter. All of these households were from the "poor" wealth households.

PERCEPTION OF FOOD SECURITY INDICATORS	**Percentage** out of 40 households
Consider food situation to be **worse** than 4 months ago	0
Consider food situation to be **worse** in comparison to one year ago	0
Consider food situation **not** to be **enough** in the last four months	60
Worried where their food was coming from at the time of the survey	5
Think the food situation will be **worse** in the next 4 months	0
Enumerators thought households did **not** have **enough** food for the next 4 months	70

CONCLUSION: FOOD SECURITY

In Nawbad Qaracha Bolaq and surrounding villages of this area, sustainable food security and rural community food self-reliant requires rehabilitation strategy that leads to further sustainable food security, community participation and specific programs that improve the condition of living of the "poor" households. The programmes, therefore, should be suitable for the different agro-ecological zones and community skills. Rebuilding and revitalization of agriculture and alternative livelihood sectors are the only subsets of the broad national view and it is the central issue of the sustainable food security of "poor" household in this area.

77

The priority is rapid revival of agriculture production to improve staple crop production in this area. The challenges or limiting factors are lack of water, availability of inputs (improved seeds, fertilizer and tools), rehabilitation of rural infrastructure and the services (pest and disease control, extension, credit).

Water is one of the most precious resources; the consequence of the successive and severe drought has been serious depletion of the water resources, particularly underground water. Priority action is better planning and management of water resources including river basins to ensure sustainability use of the rivers for irrigation and generation of power and crating of national water authority.

The second most important challenge is to increase the quantity of quality seed production; to further develop the selection of improved varieties and to develop private enterprise-based national seed industry. A priority needs to be placed in developing rainfed seed verities that is suitable for dry land conditions. Wheat and Barley are the major crops growing Nawabad Qaracha Bolaq. However, legumes and maize play important roles in retaining food security in the area. It is strong believe that rotation of crop production can reduce overall risk of pests and diseases act as a buffer against low market prices, yield increase. Furthermore, it will also enhance dietary diversity which is a concern for the household's food security.

RISKS TO LIVES – Nawabad Qaracha Bolaq

The risk to lives section of this report highlights areas in the country where individuals are more at risk of dying and understanding the reasons behind this increased risk. It particularly focuses on better understanding the links between nutritional risk, food insecurity and mortality.

MORTALITY INDICATORS:

The current crude mortality rate (CMR) of 0.5% in Nawabad qaracha Bolaq is not above both the emergency threshold rate of 1.0 deaths/10,000 people per day and the normal developing country level of 0.5 deaths/10,000 people per day. Furthermore, the children under 5 years of age mortality rate of 0.5 does compare favourably with the stable developing rate of 1.0 deaths/10,000 people per day and is not above the emergency threshold rate of 2.0 deaths/10,000 people per day.

Because of the high rate of maternal and child mortality, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. Of the number of children born in the last 4 months, the percentage of births attended by a skilled birth attendant was 20%. This figure, however, is not likely to include stillbirths or children who died during the last four months as a result of the difficulty of obtaining such information.

RISKS TO LIVES INDICATORS	Percentage (%)
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10, 000 / day)	0.5%
Under 5 mortality in last 4 months (Deaths / 10, 000 / day)	0.5%
Births in last 4 months attended by a Skilled Birth Attendant (n=8)	20%
Morbidity Indicators	
Children < 5 years with watery diarrhoea (n=21)	20.0%
Children < 5 years with bloody diarrhoea (n=21)	26.7%
Children < 5 with ARI (n=45)	33.3%
Children between 6 and 59 months with measles vaccination (n=21)	73.3%
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate) (n=42) (n=26)	25%
Children > 6 months and <59 months with Oedema (n=42)	8.3%
Children > 6 and <59 months with severe acute malnutrition (n=21)	0
Children > 6 and <59 months with moderate acute malnutrition (n=21)	8.3%
Children > 1 year and <59 months with a MUAC under 13.5 cm (n=21)	8.3%
Children > 1 year and <59 months with a MUAC under 12 cm (n=21)	0%
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm (n=23)	31%
Reproductive age women (15-49 years) with a MUAC < 21.0 cm (n=23)	4.0%
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt) (n=40)	0

MORBIDITY INDICATORS:
The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The' incidence of watery diarrhoea among children under 5 years of age at 20% is *cause of concern.* The presence of bloody diarrhoea in 26.7% of the children in the village indicates a more serious concern. Many of the cases of diarrhoeal disease might be attributed to hygiene practices and a shortage of water. The percent of children under five suffering from Acute Respiratory Infections is 33.3%. Measles vaccination coverage in Afghanistan is 95%, and MOH figures for the Hazrat Sultan district report coverage to be 89%. The measles vaccination coverage of 73% in this round of data coverage is inconsistent with other figures.

CHILDREN NUTRITIONAL STATUS:
25% percent of children in the sample have global acute malnutrition, which includes children under 5 years of age with oedema and a weight-for-height measurement below 80 % of the median of a reference population. Children with oedema are at an extremely high risk of dying and in this sample, 8.3% of children were oedematous. Children below 70% are considered severely malnourished (acute) and also have a high risk of mortality. In Nawabad qaracha bolaq , no children were severely wasted. However, the percentage of children under 5 years of age with moderate wasting in this sample is 8.3%.

Low MUAC measurements also indicate children at risk of mortality. The presence of 8.3% of children with a MUAC lower than 13.5 cm between 1-5 years may be a cause for concern. No children had a MUAC of less than 12.0 cm.

ADULT WOMEN NUTRITIONAL STATUS:
Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. In Nawabad qaracha bolaq 31% of women have a MUAC below 23.0 cm and 4.0% of women have a MUAC below 21.0 cm.

MICRONUTRIENT DEFICIENCIES:
The presence of iodised salt in the house is a proxy for the use of it and also therefore of iodine deficiency. No households had iodised salt as all salt was locally mined block salt during the survey. However, the iodised salt is available in the local market and there is a factory that produces iodised salt in Ghol mahalah, Shaberghan City.

HEALTH FACILITIES:

The table below lists the health services or facilities that are available to the people in Nawabad Qaracha Bolaq area. However, there are no health facilities in Nawabad qaracha bolaq itself and all the residents of the neighbouring villages travel to Aybak City (Provincial Capital City) to use Aybak City's health services. Aybak City has one main Hospital and comprehensive health centres and a number of private doctors. People travel there with public transportation, the cost of getting to Aybak city from Nawabad is 100 Afs. In an urgent situation, people hire tractor the cost of which is 1000Afs.

All the Government health services in Aybak City are free of charge, and as a result they are used largely by poor and middle income families. The wealthy class of Nawbad Qarcha Bolaq and the surrounding area goes to private doctors who charge 40 Afs for a visit. Many people believe that the services of a private doctor are better than those of the government and if one is able to afford 40 Afs he/she should go to the private doctor. Medicine needs to be paid for in both cases.

Health Facilities Table

	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts	Aybak	1 to 2 hours	1000	Everybody	Yes
Basic Health Centre	Aybak	1 to 2 hours	1000	Everybody	Yes
Comprehensive Health Centre	Aybak	1 to 2 hours	1000	Everybody	Yes
Hospital	Aybak	1to 2hours	1000	Everybody	Yes
Traditional healers/Birth Attendants	Nawbad Qaracha Bolaq	Five minuts	1000	Women	Yes
Skilled birth attendant	Aybak	1 to 2 hours	1000	Women	Yes
Private doctor	Aybak	1 to 2 hours	1000	Everybody	Yes

The use of health facilities has stayed constant in the last four months.

WATER SOURCES:

In Nawabad qaracha bolaq, the public sources of water are hand pump and open wells. In addition to that, most households have wells in their houses. The majority of the village people prefer to get their drinking water from hand pumps rather than from the open wells (which are occasionally used to by animals). The people reported that both from the hand pump and open well the quality and the quantity of water available have stayed the same in comparison with last year.

The number one priority for the village is to get more access to clean drinking water through the construction of more hand pumps or deep wells.

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
Hand pump	Less than hour	Same	Same
Open well	Less than hours	same	same

SANITATION FACILITIES:

There are two common types of toilets in the Nawabad Qaracha Bolaq area: open area, vault latrine. The majority of households have a vault latrine toilet in their houses. The vault latrine is usually located in public places like schools and mosques and is always separate for men and women. The very low income households of Nawabad Qaracha Bolaq who can not afford to build a latrine in their household, use an open area toilet.

CONCLUSION: RISKS TO LIVES

The crude mortality rate is not above both the emergency threshold rate of deaths per day and the normal developing country level of deaths people per day. Furthermore, for children under 5 years of age, the mortality rate does compare favorably with the stable developing country rate and is less than the emergency threshold rate of deaths people per day. Acute malnutrition is a very common problem currently effecting children less than five years of age in Nawbad Qaracha Bolaq village and the surrounding villages.

In Nawbad Qaracha Bolaq, water and sanitation were completely inadequate. Presumably, the rates of water and blood diarrhea can be attributed to these two factors. Overall, most of children less than five years of age had had diarrheas disease and acute respiratory infection in the period to the survey. This should be improved as rapidly as possible. In addition, adequate preventative and curative health facilities and services should be available and accessible to the village community.

A mass measles vaccination campaign is also needed in this village. Measles vaccination coverage is poor and is probably not interrupting measles virus transmission. Moreover, community training in public health is essential introducing the community to toilets and other sanitation programmes that will improve the condition of Nawbad Qaracha Bolaq's health problem.

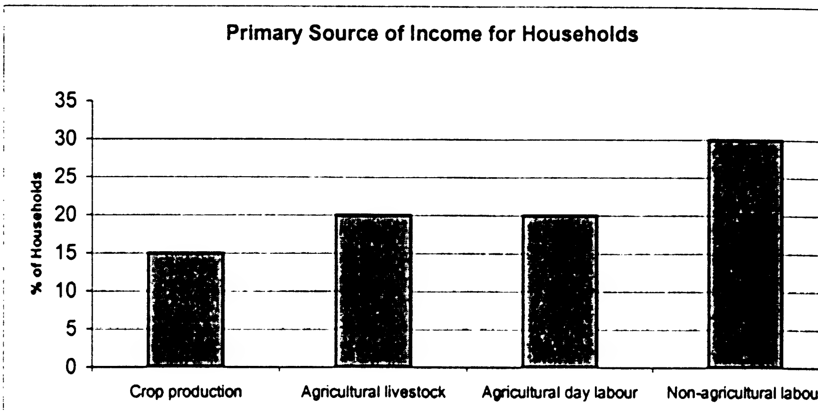
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LIVELIHOOD SECURITY – Nawabad Qaracha Bolaq

The Livelihood Security section is structured to give a general overview of the livelihood strategies of the community and the households within the community. It then looks at the main livelihood strategies of these households, describing the state of the livelihood assets related to each particular income source. This section also seeks to provide indicators of current shocks to livelihood sources and households' abilities to cope with these shocks. This information is also intended to provide agencies with sufficient information to decide whether there is a need to respond to a current shock. It finishes by looking at the characteristics of households that are at high risk of being impacted by future shocks and offering recommendations on how agencies can develop household livelihood opportunities, mitigate against future shocks and protect against livelihood asset depletion.

LIVELIHOOD STRATEGIES:

The primary income source in Nawabad Qaracha Bolaq during the period of June to September 2003 was non- agricultural day labour, followed by agricultural day labour and agricultural livestock. Market labour demand and daily rates influence the income of Nawabad Qaracha Bolaq's "poor" and "middle" households considerably.



Nawabad Qaracha Bolaq households, 30% stated non-agriculture day labour as their primary income sources. 76% of "poor" households and 50% of "middle" income households also reported it as an income source. Agriculture day labour and livestock production were the second most important livelihood source for "middle" and "poor" households.

The table below captures the percentage of households engaged in different activities. This provides an indication of the relative importance of different livelihood strategies to the community. Non-agriculture labour is of primary importance as 60% of all households gain income from this activity. "Poor" households particularly depend on this activity (50%), while "middle" income households form the remaining 10%.

	Percent of households with Income Source	% of Households with Women's Income Source
Spinning/ Carpets Labour	--	15.0
Trade / Shops	--	--
Spinning/ Carpets Business	--	5.0
Agricultural Labour	65	--
Agricultural Livestock	45	--
Take a Loan	25	--
Microbusiness	--	--
Agricultural Crops	55	--
Collection-natural resources	70	5.0
Formal Wage Labour	0.0	--
Informal Wage Labour	10	--
Remittances	--	--
Rental Income	5.0	--
Gifts/Gleaning	--	7.5
Repayment of Loan	--	--
Begging	--	--

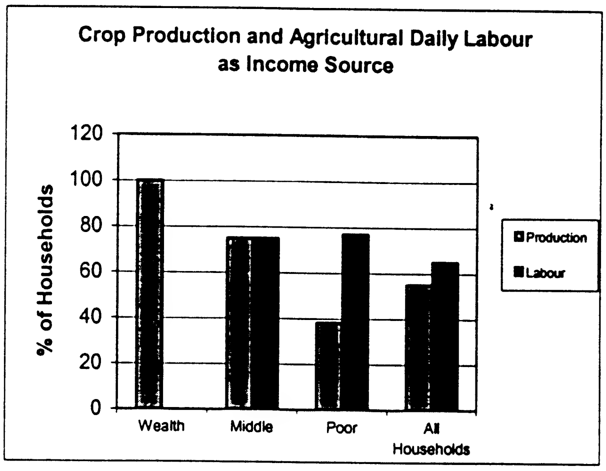
Data regarding women's income generation can clarify the role of woman in current livelihood strategies and identify potential for future involvement. Only (15%) women made carpets for wage, followed collection of natural resources and carpet business.

Carpet labour was the greatest female contribution to household income for women of all wealth categories. In "poor" and "middle" income households carpet weaving accounted for 15% of income generation activity. No "wealthy" household women was engage for carpet wage or business. Both trade and collection of natural resources were important income sources for the "poor" women households. Furthermore, activities most important to men tended to less important to women. However, all women received income from gifts, which men of all wealth groups did not consider an income source.

91

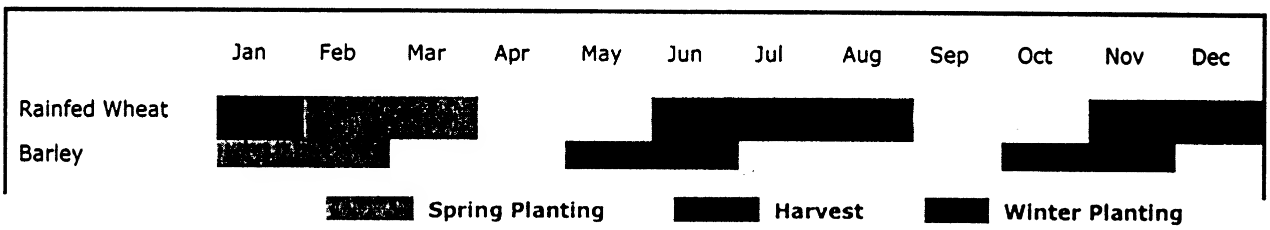
CROP PRODUCTION AND AGRICULTURAL DAILY LABOUR

Crop production, agriculture labour, non-agricultural day labour and collection of natural resources remain important sources of income for the majority of the Nawbad Qaracha Bolaq residents. The graph on the right demonstrates the percent of households all wealth groups for both crop production and agricultural day labour.



All households were engaged in rainfed crop production. However, "wealthy" income households tended to be oriented toward crop production rather than labour, whilst "poor" households tended to be engaged relatively in labour rather than crop production. This can be explained by the input costs, land requirements, and water accessibility needed for crop production. "poor" households are generally less able to access these factors.

The main crops grown in Nawabad Qaracha Bolaq are wheat and barley. The table below shows the crop calendar for rainfed wheat and barley in the area. Wheat is harvested during the months of June and July. Barley is harvested during the months of May and June. Wheat and barley are planted only in the winter.



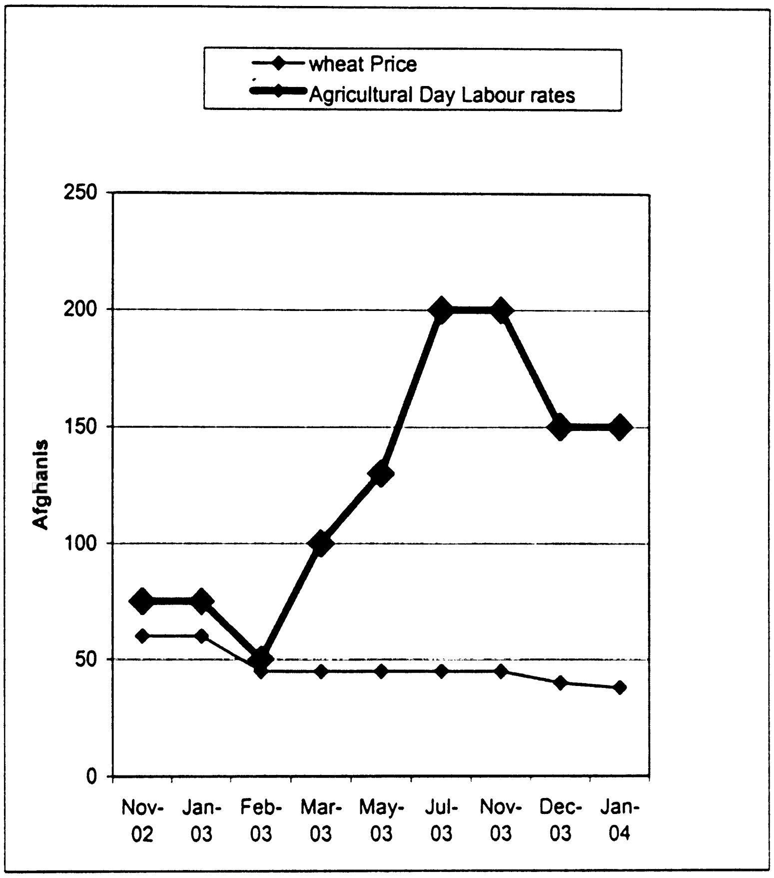
Crop Production Assets: Land Ownership and Draft Oxen

In Nawabad Qaracha Bolaq , 75% of households own rainfed land with an average landholding of 81 Jeribs. The average amount of land own differs according to wealth. On average "wealthy" households own 100 Jeribs, "middle" income households do not own land and the "poor" households own 8 Jeribs. Thus, land ownership is a primary indicator for wealth differentiation in many parts of Afghanistan. Though draft oxen are extremely important to household crop production, in Nawabad Qaracha Bolaq, none of the interview households owned oxen.

	All Households	Wealth	Medium	Poor
Households owning land (%)	75	100	0	70
Average amount of land owned (jeribs)	81	100	-	7.7
Households owning rainfed land (%)	75	100	0	70
Households owning one or more draft oxen (%)	0	0	0	0

Shocks to Agricultural Yields

In Nawabad Qaracha Bolaq, two households reported over 50% crop losses. Two households had more than 50% crop losses by smuts (seed borne) diseases and leaf, stem born diseases such as rust. The leaf and stem borne diseases normally reduce yields by decreasing the photosynthetic area of the plant.



Market Prices of Agricultural Goods

In Aybak city market, wheat prices remained constant from February 2003 to January 2004. The current price of around 38 Afghanis per seer (7 kg) is slightly lower than January prices.

As the graph on the left demonstrates, agriculture day labour rates are highest during the harvest, compared to planting time (November to January).

During 2003 planting season, the daily labour wage was 75 Af's, though 2004 rates during planting have since doubled (150 Af's).

Daily labour increased from March 2003, reaching a high of 200 Af's per day from July to November 2003. This period corresponds with spring planting season and the harvest of winter crops. Should wheat prices remain depressed while agriculture labour rates are inflated, input cost will rise so that farmers are forced to stop growing wheat.

LIVESTOCK

Livestock ownership is a primary source of income for 20% of households in Nawabad Qaracha Bolaq and 45% of households report some income generation related to livestock. Besides selling the livestock and household consumption, post gaaw (cow skin), post buz (goat skin) and qaraqal (sheep) skins can be sold.

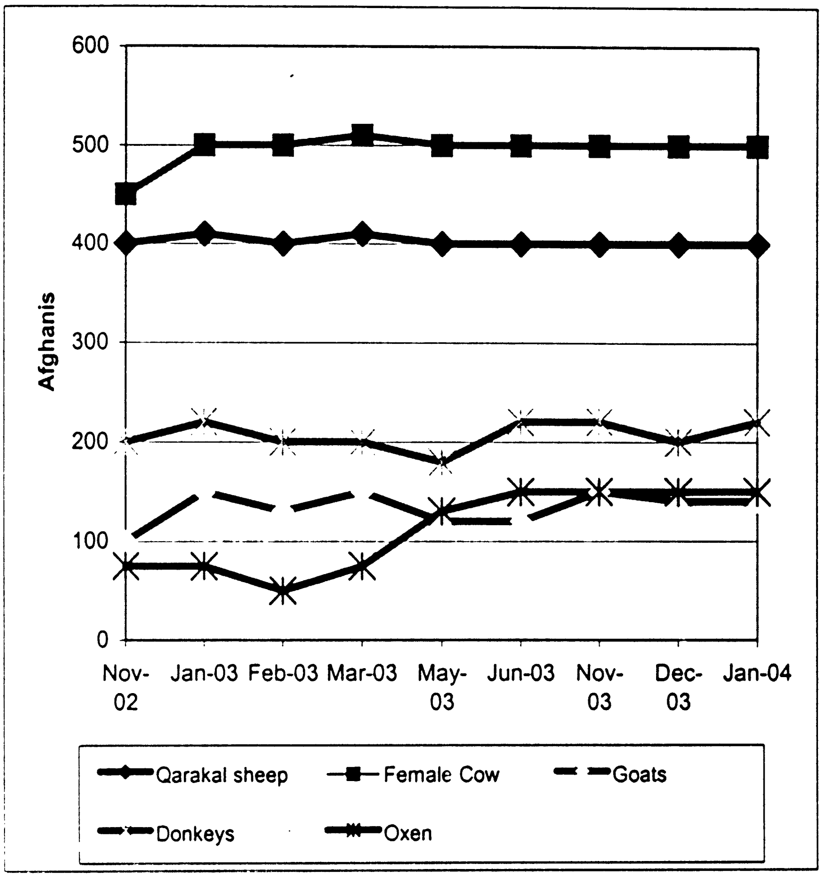
In Nawabad Qaracha Bolaq, 90% of households own animals. The number of animals owned by a household often indicates status within the community. Wealthier households own more animals compared to "middle" and "poor" income households. All "wealthy" households owned Donkeys (100%). This animal is particularly important as long distance transport, water fetching and travelling to the market. In comparison, only 50% of the "poor" and "middle" income household owned Donkey compared to 100% of "wealthy" income households.

	Goats	Sheep	Cows	Donk
Average Number Owned – Wealth	47	152	2.0	3.0
Average Number Owned – Middle	7.0	10	0	1.8
Average Number Owned – Poor	6.0	9.0	0	1.1
All households	20	94	2	1.6

Livestock disease

When asked livestock diseases, the male village leaders noted that their sheep and goats were affected by Sheep Pox and their cattle had foot and mouth disease. There are a total of 3000 sheep and goats owned by the people of Nawabad Qaracha Bolaq, with 100 reported affected by PPR Sheep Pox.

The cattle owned in the village of Nawabad Qaracha Bolaq ware 15 cows. The data shows that 67% of the cattle owned by the village were affected by foot and mouth disease. Since, both of these diseases are deadly, households should have offered evidence that some of their herd had died recently, but this was not the case. Therefore, it is unlikely that Sheep Pox is as prevalent as village leaders noted. Additionally, it is unlikely that all cattle and oxen suffered from foot and mouth, though the disease has some presence in the area as it has been a problem in the past. Livestock owners in Nawabad Qaracha Bolaq and surrounding areas have not yet had their animals vaccinated and thus their livestock are at risk of suffering from disease outbreaks.



Livestock Prices
Nawbad Qaracha Bolaq and surrounding villages rely on the Aybak city markets livestock sales and purchase.

As seen on the left, both qaraqal sheep and cow prices remained stable from November 2002 until January 2004. However, oxen prices increased between February and January 2004. Goat prices were stable at approximately $150, with seasonal variation.

Donkeys are considered the second most important animal to own, and prices tended to remain stable around $220, though some seasonal variation existed.

Grazing land and Access to Water
According to village leaders, access to grazing land has increased in the four months prior to the survey. Grassland productivity has been similar to previous years, whilst access to water increased. However, water shortages between 1999 and 2002 did play a role in subsequent animal losses. Unfortunately, local authorities were not able to use changes in grassland and water access to predict future threats to livestock. Increased awareness of threats to grazing land access might have allowed communities to protect themselves better against drought related animal losses. In addition, common grazing land is sometimes compromised by illegal plantations of rainfed wheat. This practice can also compromises community animal stocks.

EMBROIDERY, CARPETS, GILIMS, WOOL and SILK SPINNING:

Carpet making was not an important source of income for Nawabad Qaracha Bolaq households. However, 15% of women households claimed source of income. According to the women, carpet weaving is engaged for both income generation and household consumption. In "poor" and "middle" income households carpet weaving accounted for 15% of income generation activity. Carpet weaving for wages did not usually occur in a separate weaving unit; instead, participants were given material by an investor who paid a set rate dependent on the difficulty of the pattern and the length of carpet completed.

Furthermore, no changes in market prices or wool/silk availability were noted and input costs remained the same. However, both men and women observed that households engaged in these activities spent more time weaving.

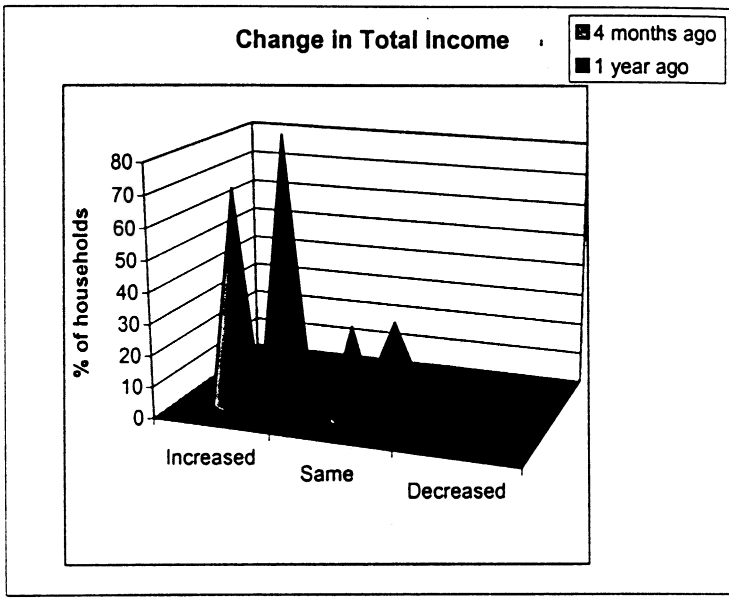
COLLECTION AND SALE OF NATURAL RESOURCES
Fourteen households were involved in the collection and sale of natural resources. Three households were from "middle", ten were from "poor" income households and one household was from the "Wealthy" income households. All these households collected and sold bushes and animal manure. Both livelihood activities were negatively impacted by a recent drought. Lack of rain meant bushes could not grow as well and fewer animals (reduced dung available for collection). The village did not feel the future of these resources would be compromised since the animal stocks would be replenish and bushed are cut above the root areas so they will grow back after the rains.

Non-Agricultural Labour (skilled and unskilled manual labour)
In Nawabad Qaracha Bolaq, 60% of households claimed it manual labour as an income source. Most (10) households ware from "poor" households, followed by "middle" (2) income households.

OTHER INCOME SOURCES

The only other main income source the "poor" households in Nawabad Qaracha Bolaq was loans. Loans were a major source of income for 25% of the "poor" households.

CAPACITY TO COPE: COPING STRATEGIES



As seen graph on the right, 30% of all households reported stable income over recent month, while 70% of households reported and income increase. This contrasts with last year's trend where most households (80%) reported increased income compared to only 70% in the last four months. There is slight instability in income rates compare to last year and it suggests livelihood insecurity.

The household coping strategies included here were not meant to include all possible options a home might exercise to survive tough times. The activities chosen were meant to reflect easily measured behaviours that might predict declining livelihood and food security in Afghanistan. The chosen behaviours were sub-divided into erosive and non-erosive coping strategies to better understand the effect of household coping behaviours on future livelihood security. The division of behaviours cannot be considered mutually exclusive as some non-erosive behaviour (selling motorcycle, bicycle etc.) might affect future opportunities. Similarly, the list does not reflect a continuum of behaviour, but general indicators of a worsening situation. However, some households experiencing chronic or transitory poverty may also periodically use these strategies.

Non-Erosive Coping Strategies (last four months) (n=20)	Percentage
Household member migrated for labour	5
Sons sent to work as indentured labour	5
Household members worked more hours to make daily expenses	10
Households who borrowed food from relatives to make a meal	60
Sold Carpet / Gilims from the house	25
Consumption of dried bread	25
Erosive Coping Strategies (n=20)	
Household took out loan	25
Households who took food on credit from local shop	60

Non-erosive coping strategies

In order to meet expenses, 25% of households sold non-productive assets such as carpets/gilims. These sales are often linked to preparation for the winter season. Other common strategies include working longer hours (10%) and household member migrated for labour (5) and sons sent to work as indentured labour(5). Food sources and consumption patters are also key indicators of vulnerability. Of the families interviewed, 25% consumed dried bread, a clear indication of food insecurity. Other than food consumption changes, most families needed external support to find sufficient food. Most households (60%) were forced to borrow food from relatives to make a meal in the last four months.

Erosive and distress coping strategies

It is apparent that strategies adapted by households to deal with shocks varied with individuals, households and villages. In Nawabad Qaracha Bolaq, 25% of households took loans as a coping strategy to meet daily expenses. All households were from the "poor' income households. Many households (60%) required credit from local shops in order to obtain sufficient food. It is apparent that both "poor" households are extremely vulnerable as they jeopardize future production capacity to cover immediate needs.

Income Diversity and Capacity to Cope – Risk to Livelihoods

Capacity to cope is defined as the capacity of households to absorb shocks and to adapt to stresses induced by climate, price instability, unemployment and complex emergencies such as political crisis. However, households with various income sources are better able to cope than households who rely on only one or two income sources. The income diversity score is simply a count of the number of income

	Average Income Diversity Score
Wealth	2.7
Middle	3.8
Poor	3.4
All households	3.4

sources for each household. In Nawabad Qaracha Bolaq, households have an average income diversity score of 3.4. In many cases the wealthier household often score higher income diversity measures, however, in this situation all households wealth groupings have a similar score. The main sources of income in Nawabad Qaracha Bolaq were non-agricultural labour, agricultural day labour, livestock, crop production, , loans collection and sell of natural resources.

CONCLUSION - LIVELIHOOD SECURITY SUPPORT

The survey shows that the livelihood strategies adapted by the households varied with individuals and households across the three wealth groups in Nawbad Qaracha Bolaq. In order to meet expenses, common livelihood strategies in Nawbad Qaracha Bolaq include households selling non-productive assets, working longer hours, household member migrated for labour and sons sent to work as indentured labour. Of the families interviewed, 25% consumed dried bread, a clear indication of food insecurity. Most families needed external support to find sufficient food. Most households (60%) were forced to borrow food from relatives to make a meal in the last four months.

The priority support to improve the livelihood security of this sentinel site is rapid revival of the crop production by ensuring the following:

- Supporting programs with a wide range of development objectives. For example, investments in soil and water conservation efforts supported by cash for work or food for work programs will have potential long-term implications for increasing agricultural productivity and crop income of this sentinel site. This will lead to enhance labour productivity and higher wage earnings.
- Improved health and nutrition achieved through food-assisted maternal and child health programs or cash for work affords at improved water and sanitation again will have immediate implications for individual health and well-being and also promote productivity and income-earning potential over the long term.

1

NSS METHODOLOGY OVERVIEW[1]

The National Surveillance System (NSS) is based on a sentinel site system. These sentinel sites are tracked over time to monitor changes in food security, livelihoods, and nutritional status. The sampling methodology is based on a multi-stage sample selection process and incorporates both urban and rural areas in the sample. The table and narrative steps below detail the process used to determine the stratification framework and levels of the sample.

Rural strata	Urban strata	Rural Representation and Method of Division	Urban Representation and Method of Division
Provinces	Provinces	Every province is to be represented in the surveillance system. 33 provinces are divided according to Ministry of Interior definition of provincial boundaries.	
Districts	Urban Areas	Every rural district is to be represented in the surveillance system. Rural districts are divided according to Ministry of Interior definitions, except in the cases where currently recognized local administrative boundaries differ.	Urban areas are defined as having a population over 500,000, >100 shops and permanent food market. These include Kabul, Mazar-i Sharif, Kandahar, Herat, Jalalabad, Kunduz.
Livelihood Zone	Livelihood Groupings	Districts are divided into ago-ecological or livelihood zones.	Urban centers are divided into *nahia*, which is the sub-unit of an urban area used by the Central Statistic Office. *Nahias* in the urban setting are categorized into livelihood groupings.
Sentinel Site - Villages or Mosque Areas	Sentinel Site - Urban Blocks	One settlement or mosque area within a settlement is selected from each livelihood zone as the sentinel site.	A block is selected from each of the livelihood groupings. If the block is not large enough for a sufficient sample, then a neighboring block will also be included in the sample.
Wealth groups	Not applicable	In each sentinel site settlement, a wealth group breakdown is conducted in which all the households will be categorized into three wealth groups; poor, medium, and better off.	Because people do not have detailed information on households in their blocks, it is difficult to implement a wealth group breakdown.
Households	Households	Households are randomly selected proportional to actual representation in the population of households within the three wealth groups. The number of households selected and the selection process is detailed below.	Households are randomly selected from the block.
Individuals	Individuals	Individuals are selected from each household in the survey. Selection of individuals is only necessary for measuring certain indicators (i.e. anthropometric status) and will be based on the case definition of the indicator.	

The steps for defining livelihood zones and household selection for rural application of the NSS sampling methodology are explained below, and these steps can also be applied to the corresponding urban strata discussed in the table above.

Defining Livelihood Zones within a District

The first step completed in defining a livelihood zone was to find information on the following subjects in all settlements in a district, or as many as possible.

Defining Criteria:

- Agro-ecological context (topological/geological/soil description, water, land-cover/land-use)
- Economic resources and activity (sources of income and food, access to markets)
- Services (health, education, water, roads, other services)
- People (ethnicity, number of households in settlement).

Once the information was collected, the district was separated into livelihood zones based on *agro-ecological context* and *economic resources and activity* features. *Services* and *people* features were also considered but were not usually the basis for livelihood zone distinction.[2]

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[1] Information on the methodology can be found in the NSS methodology document on http://www.mrrd.gov.af/vau/
[2] In some areas of implementation, the agro-ecological zones used by the 2002 WFP-implemented *Country-wide Food Needs Assessment* were used to define livelihood zones.

Sentinel Site Selection

Since sentinel sites are meant to be representative of their zone, the site, to the extent possible, was selected to mirror the majority of the settlements in the livelihood zone with respect to the defining criteria mentioned above. Inevitably, it is impossible to find homogeneity across all of these indicators, thus *agro-ecological context* and *economic resources and activities* were given a priority. Additional factors that were considered when choosing a sentinel site included:

- Population of sentinel site should be representative of a majority of settlements in the zone
- Distance from roads and markets relative to other villages/towns in zone
- Presence of other related surveys in order to avoid survey fatigue
- Permission by local authorities and community leaders.

Wealth Group Differentiation

As part of focus group discussions, government surveillance unit teams separately asked male and female focus group members to identify how the people in the community define wealth and then define better off, medium and poor households. Once these characteristics were agreed upon, both male and female teams used the list created in the male focus group of all households in the community to place each household into a wealth group category and then asked for the rationale behind the placement. From here male and female lists were checked to find out when the households had been assigned to a different wealth group. If households were different, male and female surveyors together had to decide on a mutually agreeable placement for the households, either by following up with focus group members or by noting that one group had a knowledge gap regarding the household under discussion.

Household Selection

For the purpose of the national surveillance system, a household is defined as a group of individuals sharing income and expenditure and that are living within the same compound. Households were randomly selected proportional to their actual representation in the population within the three wealth groups. The number of households surveyed depended on the size of the sentinel site. If the settlement had over 200 households, a mosque area or a distinct community area was selected as the sentinel site. For nomadic populations of less than 50 households, it was recommended to include all households if possible.

Total households in village	Number of households selected
< 50	All households if possible
50 - 75	20
76- 99	30
100-200	40
> 200	Choose community within village as sentinel site

Selection of Individuals

Selection of individuals within households was only necessary for measuring certain anthropometric status. In this case, all individuals in selected households meeting the case definition criteria for these indicators were included in the survey

Data Collection Instruments and Fieldwork

Data collection for the NSS was originally envisioned to occur three times a year,[3] and the fall round 2003 was the first round using standardized questionnaires. The male and female sentinel site questionnaires included focus group discussions with male and female elders. The male household questionnaire was asked to the male head of household and the female household questionnaire was asked to the female head of household. Many of the questions included in the NSS standardized questionnaires referenced the period four months prior to the survey in order to gain an understanding of issues of seasonality in relation to livelihood strategies, food security and risk to lives. The market survey questionnaire collected data at the provincial capital as well as at the main permanent food market nearest to each sentinel site on a monthly basis.

Government surveillance data collection teams consisted of one NGO supervisor, two staff from MRRD (one male and one female), two staff from MAAH (one male and one female) and two other casual staff. They were all trained on the surveillance system project as well as the implementation of the questionnaires.

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[3] Lessons learned from the fall round suggested that collecting data three times a year was neither financially feasible nor necessary for most locations. The pilot NSS collected only a second round of data in spring 2004